THE EDWARD J. COLLINS, JR.
CENTER FOR PUBLIC MANAGEMENT

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INFORMATION TECHNOLOGY ASSESSMENT

CITY OF NORTHAMPTON, MASSACHUSETTS

EDWARD J. COLLINS, JR. CENTER FOR PUBLIC MANAGEMENT

DECEMBER 2014

UMASS BOSTON

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PROJECT SCOPE AND METHODOLOGY

At the request of City of Northampton, acting through its Mayor, the Collins Center for Public Management (the Center) performed an Information Technology (IT) Assessment.

The engagement involved several tasks, all of which contributed to a sound basis for the Assessment.

a. Review of background material;
b. Inventory of current systems and resources;
c. Interviews of key staff;
d. Development of the assessment; and
e. Presentation and discussion of findings and recommendations.

This Assessment brings together the findings and recommendations into one document which provides the comprehensive, consistent direction that Northampton is seeking in order to be able to make prudent decisions regarding how to enhance the contribution of IT to Northampton, its residents, and its customers.

In order to meet Northampton's needs and expectations, the IT Assessment combines both an informed view of the City's functional requirements and an understanding of the various options which Northampton ought to be considering in developing its strategy for enhancing IT.

Specifically, the IT Assessment includes:

- Findings and recommendations;
- Articulation of a strategy for Northampton to take as part its effort to enhance IT as a critical function in the delivery of City services;
- Priorities among actions which Northampton ought to take with respect to the objectives consistent with Northampton's vision or other circumstances; and
- Short-range actions that Northampton should take to strengthen its performance.

Methodology

The Center's research was guided by the following principles:

- Understand that every municipality and district is unique and reflect that uniqueness in the recommendations;
- Obtain diverse points of view on all issues;
- Focus on the current situation and future opportunities, and refrain from passing judgments on past occurrences; and
- Make recommendations that are pragmatic and adaptable.

ABOUT THE COLLINS CENTER

Established in July 2008, the Edward J. Collins, Jr. Center for Public Management is dedicated to improving efficiency, effectiveness, governance, and accountability at all levels of government, with a particular focus on state and local government. The Center's aim is to enable public entities to provide high quality services to the people they serve on a sustainable basis. The Center is located within the John W. McCormack Graduate School of Policy and Global Studies at the University of Massachusetts Boston. For more information, please visit the Center's website: http://www.collinscenter.umb.edu/

MANAGEMENT INFORMATION SYSTEMS DEPARTMENT OVERVIEW

Information Technology started in the City with a Burroughs computer system in 1976. The Management Information Systems (MIS) Department is currently located in the Puchalski Municipal Building. The budget for FY 2015 is $507,273 comprised of $206,013 in personnel expense (not including benefits) and $301,260 in other expense.

Staff

The MIS Director position has recently become vacant after the director left to take a position in another municipality.

A staff of three report to the Director: Database Analyst/Web Developer, Systems Analyst, and Principal Clerk. The following is a summary of roles/duties for the positions:

Database Analyst/Web Developer:

- Database Administration
- Data Storage Monitoring and Management
- PC Support
- Application Software Support for GeoTMS and LaserFiche
- Symantec Endpoint Virus Protection
- Manage SAN, and NAS Bbackups
- Manage Google Mail
- Ricoh Print Services
- Web Administration

Systems Analyst

- Network Support
- PC, Desktop, Laptop Support
- Server Support

Principal Clerk

- Helpline response, first level of support, enter service requests in VueWorks
- Initial setup for new employees, MUNIS/Email/etc.
- Password resets
- Orders equipment and processes accounts payable for the department
- Phone billing cost allocation to depts. including Schools (including the Schools E-rate component)
- Accounts Payable/ Payroll Checks runs
- Department Secretary

Computer Hardware:

See Exhibit 1 for MIS Computer Center hardware, DPW-based computer hardware, and redundant backup hardware at Fire Headquarters, and see Exhibit 18 for a list of desktop, laptop, printers, and

network equipment located in departments across the City. Public Safety computer-related equipment is listed in Exhibit 17.

Current plans are to move some of the larger application systems (GeoTMS and LaserFiche) to the underused VREEM server which previously supported the MUNIS system when it was run on site.

System Software and Utilities:

- VEEM (backup software)
- VMWare
- BackupExec (backup software)
- UBUNTU (Linux)
- 3COM (HP) VCX 9.x (VOI Voice Software)
- Solarwinds (network problem management/tracking tool)
- Windows 2003
- Windows Server 2012
- Microsoft SQL Server 2005, 2008. 2012
- Windows Server R2
- Windows XP
- Windows 7
- Windows 8 Professional
- Wordpress
- Digital Signage

Major Application Software:

- Tyler Technologies MUNIS system, covering general ledger, accounts payable, accounts receivable, real estate and personal property billing, purchasing, human resources, utility billing, and payroll. 120 users (40 active) are supported in the City and School District. The system is accessed as software as a service (SaaS) via the "Cloud" from the MUNIS Falmouth, Maine computing center.
- GeoTMS Permit and Licensing system.
- CLT Universe Computer Aided Mass Appraisal (CAMA) System
- Microsoft Office 2007 suite.
- Google App's for Government including G-Mail.
- Laserfiche (imaging)
- VueWorks
- RecTrac
- Pictometry (GIS "Flyover" Pictures with coordinates)
- Postini (Google Apps web filtering and storage)
- MIS only use software - Audacity, PDF-Creator, 7ZIP

See Exhibits 2 and 3 for diagrams of the interfaces / linkages between application systems.

Networks, Data, and Voice Communications

All City buildings are linked via a fiber-optic network terminating in the MIS Computer Center. Voice technology is Voice Over Internet (VOIP), using a 3COM system running on a HP Server. See Exhibit 4 for a network diagram.

The City and the Town of Amherst have applied for a Community Innovation Challenge (CIC) Grant to create a regional solution for the VOIP and 911 phone systems. The current 3Com VOIP system is dated and out of production, and replacement phones are difficult to acquire. The management interface is difficult to manage, and no staff are trained in its use. The City currently suffers periodic outages and internal dropped calls.

If the City and Amherst are successful, the CIC grant will fund: New physical VOIP telephone units, new layer 2 switches, elimination of many existing copper Centrex lines, management software and server, installation, training, analyzing the 911 calling system, and a 911 backup system. Benefits include: equipment cost saving, reduced support telecom staff, VOIP service creating redundancy for both municipalities, split management responsibilities between Northampton/Amherst, reliable and redundant 911 system, improved response time, and reducing the incidence of dropped calls.

Backup/Disaster Recovery Measures

The MUNIS system is run as SaaS (Software as a Service/in the cloud) with backup/recovery facilities provided as part of the service.

Backup of other City-wide systems running in the MIS Computer Center is accomplished by connected redundant servers (Storage Area Network Equipment (SANs)) housed in the Fire Department headquarters building. Data is backed up to the SANs at the Fire Department nightly. Weekly and monthly magnetic tape backups of software and data files are processed; monthly tapes are retainedfor a year. Magnetic tapes are stored in a safe in the MIS department. Systems running at DPW, Recreation, and the Council on Aging are connected to and backed up to both the MIS Computer Center and the redundant facilities at the Fire Department. (See Exhibits 5 and 6.)

Public Safety systems disaster/recovery measures are independent of the City.

Recently-acquired additional server capacity is being used to move the Council on Aging (“My SeniorCenter”) and Recreation (“RecTrac”) systems to the MIS Computer Center for improved disaster recovery.

KEY FINDINGS AND RECOMMENDATIONS

Key Finding Number 1: Information Technology Leadership

There has been a lack of IT leadership; projecting a limited, reactive approach to deployment of IT across the City. The MIS Department has not been a significant participant or factor in the improvement of City operations through IT technology.

Recommendation

The City has an opportunity with a recent resignation to staff the director position with a person with a pro-active approach to IT and its full potential for improving operations. The director must be an advocate for IT, providing leadership in deploying IT technology solutions across the City.

Salary compensation for the IT Director must recognize the role and responsibilities of the position. A review of the compensation level should be made to assess the ability to attract the right candidates.

Key Finding Number 2: Information Technology Strategy

There is no long term information technology strategy or plan for the City.

Planning is limited to annual submissions to the Capital Improvement Plan, primarily focused on hardware replacement. No periodic (monthly) formal reporting is done during the year. There is no long term plan or strategy.

Recommendation

Northampton needs to put in place and update annually a comprehensive information technology plan linked to the City's capital improvement plan. This will form the framework for making rational, consistent choices regarding information technology.

Since implementation initiatives and funding can extend over multi-year periods, the planning horizon should reflect that and extend beyond a year. The Center recommends a three to five year planning horizon, with major department needs considered and input sought, broken down by yearly increments, updated annually, and locked in by funding. Results against plan should be reported monthly or quarterly.

The plan should be reviewed and approved by the recommended IT Steering Committee and the Mayor.

Key Finding Number 3: Information Technology Initiatives Selection and Priority

There is no clear process to determine what IT activities should be undertaken. The prioritization of initiatives and allocation of limited IT resources are not effective and do not consider City-wide needs.

The IT function can face unlimited demands for service while dealing with limited resources. Individual departments press for services (or projects) which may or may not result in the highest and best use of limited IT resources for the City as a whole. The IT Director acting alone may not have the full overall perspective to choose the best course of action.

Recommendation

The Center recommends creation of an Information Systems and Technology Steering Committee, Planning Council, or Advisory Committee to provide oversight and better align IT strategy with the strategic goals of the City. An IT steering committee is a governance body that reviews, monitors, and prioritizes major IT activities/projects from a cross-functional perspective. The two key concerns of a technology steering committee are:

- Alignment - The committee helps ensure that IT strategy is aligned with the strategic goals of the City.
- Ownership - The units represented on the committee have ultimate ownership over the larger IT strategic decisions since those decisions will impact their organizations/processes.

The mission of this new committee would be to provide guidance, overall perspective, and direction to the IT Director, in effect to act as a board of directors to guide the planning and deployment of IT resources through actions such as:

- Review and endorse IT plans;
- Review proposed IT Policy changes;
- Review technological recommendations;
- Prioritize major projects, advise/resolve resource conflicts/allocations, focus resources on the key needs;
- Support/sponsor major projects and initiatives;
- Monitor major projects, track status;
- Monitor service levels; and
- Act as steering committees for major projects (may be a subset of the committee) to monitor progress, resolve issues, approve changes in policy and review proposed organizational changes.

The membership of the committee should consist of key managers representing the major IT-affected departments across the City.

The committee should have regularly scheduled monthly meetings with agendas issued in advance and results/minutes published.

More frequent meeting may be involved when acting in a project steering capacity, especially when nearing deployment stages.

Where appropriate from time to time, the committee could form subcommittees on particular subjects such as GIS, land records, or payroll/human resources.

Key Finding Number 4: Management Information Systems Department Name and Office Facilities

The department name and office facilities do not reflect a modern professional IT organization. The effects of a past flood are still noticeable.

Recommendation

The department name (Management Information Systems (MIS)) is dated, reflecting a 1960s era organization. The Center recommends changing the name to Information Technology (IT) or Information Technology Services (ITS).

The layout of the present facilities does not support interaction and communication within the department, has limited storage, has no conference area to meet with clients, has furniture not suited to the job, and lacks floor covering/carpeting due to a past flood. The Center also recommends moving the department to better facilities to provide a more professional, secure workspace wherein end users can meet with staff. Space should include a conference room, adequate storage, and improved furnishings.

Longer term the Computing Center should also be relocated to a more secure site. Cabling cost will be a consideration as the current computer room is the termination of all fiber-optic lines.

Key Finding Number 5: Consolidation of Information Technology Resources

Departments have added internal support staff or sourced support from outside providers due to dissatisfaction with service provided by the MIS Department. Consolidation of IT resources can offer better service and potentially lower costs through overall professional management, planning, software support redundancy, standardization of equipment and procedures, backup/disaster recovery measures, and purchasing.

The ability to recruit, retain, and develop skilled personnel is enhanced with a central department. Cross training of staff across various application systems will reduce the risk of support loss from staff turnover. The ability to develop stronger expertise in important technical areas such as networking, software support, web design, and voice and data communications is enhanced with a larger organization.

During the course of the Center's interviews, a frequently heard complaint from departments concerned the level of internal support for the MUNIS system. End users call the MUNIS Support-Line directly. However, the MUNIS staff do not have detailed knowledge of the City's configuration. See Recommendations 8 - 11 for related information.

Recommendation

Short Term (6 - 18 months)

The Center recommends consolidation of the Fire and Police IT and GIS (Planning and DPW) functions into the City IT Department. The Center's main concern here is backup of key support resources; loss of staff can have a significant negative impact on operations.

The Center also recommends the City consider building stronger resources internally for the MUNIS system to support end users, and to expand functionality, report writing, training, and version upgrade coordination.

Longer Term

The Center recommends the City consider consolidation of all City and School IT activities into a central IT department. The City of Westfield can serve as an example of a centralized IT organization. Westfield employs planned rotation of staff in supporting the various software systems and technologies used by the City and School District.

Key Finding Number 6: Formal Comprehensive Business Continuity/Disaster Recovery Plan

There is no formal written comprehensive business continuity/disaster recovery plan.

The most commonly used software application, MUNIS, is not run locally but via "Cloud/SaaS" services with remote backup of files inherent in the service. The MIS Computer Center is connected to redundant computer facilities housed at the Fire Department. The potential of additional facilities/measures are being considered with the planned hosting of the MUNIS system by the Town of Amherst in 2015.

Two potential areas for improvement (moving systems to the MIS Computer Center) have been identified by the Acting MIS Director:

- Recreation and Council on Aging systems (now underway).
- Moving Assessors and DPW based systems (under study).

Recommendation

The Center recommends the City develop and publish a formal comprehensive written business continuity/disaster recovery plan by reviewing its back-up and disaster recovery processes to ensure they provide the ability to quickly restore lost data, and that back-ups are maintained in geographically disparate locations that share few, if any, common risks.

Key Finding Number 7: MIS Department Policies and Operations

MIS Department policies, service request management, equipment acquisition policy, and equipment/software inventory records maintenance need review and improvement.

Recommendation

The Center fully concurs with the 2014 Department of Revenue (DOR) Division of Local Services/Technical Assistance Section Review of Financial Offices Report following recommendations:

Issue a Directive on Employee Systems Access:

"As the cities systems administrator, the MIS Director is the gatekeeper for all desktop users and for setting permissions for specific applications. Oversight responsibility for access to software like MUNIS must necessarily be segregated from departmental managers to effectively deter fraud, safeguard data integrity and ensure employee accountability. While this is essentially Northampton's control structure, to protect all parties against attempts to undermine the authorization chain, we suggest reinforcing it through a mayoral directive. Among other things, the directive should say that requests to create or modify any employee's user access privileges must be submitted to the MIS Director in writing and include the department head's signature. Access granted should be limited only to what is necessary to do the employee's job."

Expanding on the above, the Center recommends the City consider use of the "roles" feature, where appropriate, in MUNIS to standardize access across similar positions.

Implement Help Desk Software:

"Presently, city employees who encounter technology issues seek fixes from the MIS department through informal requests communicated via e-mail, phone or in person. Implementing a help desk ticketing software to organize and prioritize these referrals would benefit overall city operations. Besides systematizing the resolution process, such a program would provide management reports that can highlight the need for training or technology-related capital investment. In a basic system, users log requests into a program that creates a ticket for each issue and then records the time of ticket creation, the technician assigned to it, the actions taken and the ticket's resolution time. By establishing a structured workflow, the software becomes a valuable time management and record keeping tool. With many free or inexpensive help desk systems available, we encourage the MIS Director to research which would be the most appropriate for Northampton."

The equipment inventory requested by the Center as part of this assessment was assembled by the MIS Department by requesting information from City departments. An inventory of all computer-related equipment should be maintained by MIS to support replacement planning and location tracking. An inventory of software should also be maintained to track use and assure license compliance.

Centralized equipment and software acquisition by MIS should be enforced by policy to assure standardization and license compliance. Standardization of hardware and software will improve the level of support MIS provides.

Key Finding Number 8: MUNIS System Use

Despite the time the MUNIS system has been in place (and subsequent introduction of version upgrades with new features), with limited exceptions there has been little expansion of use. Acquisition of additional modules can provide tools to support improved operations.

MUNIS (a Tyler Technology software system) is the business and financial system for the City and Schools. Originally run on City processors, it is now run as a service from the cloud or SaaS (Software as a Service) basis.

Recommendation

The City's long term investment in the MUNIS System should be leveraged to improve operations.

The City should consider implementation of the MUNIS Position Control feature to tie staff positions directly to the budget. This may be particularly desirable for the School Department.

Some department heads keep track of expenses via manually loaded spreadsheets rather than either access to reports or direct file imports from MUNIS. The Center recommends development of better management reports for department heads derived from the MUNIS database via tools like Crystal Reports or training of end user staff in the use of MUNIS facilities to import data to Excel (if desired). Better awareness of standard MUNIS reports or acquisition of the MUNIS Dashboard facility also may be considerations.

The Center concurs with the 2014 DOR (Division of Local Services/Technical Assistance Section) Review of Financial Offices Report recommendations on "Departmental Receivable Schedules" (Departmentals). The Center also recommends the City consider use of MUNIS General Billing facilities, wherein departments can bill for services in a standard format and any open balance is maintained automatically therein. Bills no longer have to be forwarded to the Tax Collectors Department, which eliminates the filing, manual calculation of balances, and maintenance of the tracking spreadsheet. A limited amount of training for affected departments should be involved.

The feasibility of emailing a report or screen images from the MUNIS system from the Google Apps for Government Gmail application should be explored.

The City should also look into the feasibility of importing (from Arthur P. Jones and Associates) actual tax bill images to allow Collectors to be able to directly email copies of actual tax bills to constituents.

Rather than weekly payment re-entry by the Veterans Departmental Secretary, the Center recommends payments be set up once in the MUNIS system as recurring entries for the period desired (typically six months). Staff should be trained to do so.

The feasibility of linking the Police Perform system with MUNIS Payroll for Outside Extra Duty processing should be investigated.

Implementation of the MUNIS Employee Self-Service (ESS) Module and Go-Docs feature can act as significant enablers. MUNIS Employee Self-Service (ESS) can support capabilities wherein employees can access or update information via the web, reducing the number of inquiries to Human Resources. Available 24/7 for employees, this will allow employees access to information (e.g., printing copies of checks/direct deposit advices/W-2s, applying for jobs, signing up for training, updating selected information in their personnel records). A potential future use of ESS could involve electronic support of the annual employee benefit open enrollment process.

Currently, a large proportion (>90%) of employees have their paychecks direct deposited. Cost savings can result by eliminating the printing and distribution of direct deposit advices and instead posting images online, so they are accessible by employees via the web.

The Center also recommends that the proposed IT Steering Committee becomes the sponsor for the MUNIS system, providing high-level administrative and political support to the system, as well as a focus on its continued development and improvement. As stated previously the Center also recommends the City consider building stronger internal resources for the MUNIS system within the MIS Department to support end users, expand functionality, training and version upgrade coordination.

Key Finding Number 9: Procurement and Vendor Payment Processes

The current procurement and vendor payment process (purchasing and accounts payable) can be improved through use of MUNIS system capabilities.

Operational purchasing (e.g., selection of vendors, product selection, bidding, etc.) is for the most part decentralized. The City uses paper contracts in lieu of purchase orders. However, departmental paper purchase orders are used in Smith Vocational, Police, and School departments. As a result, funds are not automatically encumbered. The school business office and Smith Vocational manually encumber funds in the MUNIS system throughout the year, and Auditors use the MUNIS purchase function to encumber funds at fiscal year end.

The procurement and accounts payable processes are paper-based processes with manual approvals.

See Exhibits 7 through 10 for current purchasing (greater than $10,000 purchases) and accounts payable process flows.

Recommendation

Replace the current procurement process with the standard MUNIS online requisition and purchase order process. Eliminate paper purchase requisition forms where used, and enter requisitions directly in the individual schools or departments (with associated documents, quotes, etc. scanned in and attached) and allow requisitions to be approved electronically by department heads, principals, School Business Manager and Mayor (where appropriate). Electronic workflow used to approve requisitions by supervisory personnel could be subject to ranges of approval by dollar amount or type of purchase (e.g.,

IT-related equipment could require approval by the IT Director). Board member sign-off of certain expenditures could limit the electronic solution; however, there has been a recent reduction of board level approvals (School Committee excepted). Generation of purchase orders in MUNIS will automatically encumber funds, eliminating the need to manually do so in the School Department, and eliminating the manual tracking of payments against contracts in the Auditors Department. See Exhibit 11 for a potential process considering the above.

The City will have to determine the level of decentralization/centralization of operational purchasing (vendor/product selection, bidding). Operational procurement could remain decentralized using the MUNIS system processes outlined above. Including standard contract provisions on the reverse side of the purchase order form should be considered.

The Center recommends moving to a less paper-based accounts payable process. Currently, vendor invoices to be paid are copied and filed by end-user departments prior to sending the originals to the Auditors Department. Invoices and associated documents can be scanned into MUNIS in the end user departments and no copies retained there (originals retained in the Auditors Department). Electronic workflow can be used to approve invoices by supervisory personnel. Access to the invoice image and associated documents linked to the purchase order can be viewed in MUNIS. This will require acquisition of Tyler Content Management (TCM) software facilities to store the document images. See Exhibit 12 for a potential revised process.

The Center recommends the City implement MUNIS Go-Docs software to support direct faxing and emailing of purchase orders (POs) to vendors. This can reduce or eliminate the manual scanning, faxing, mailing, and emailing of documents to vendors, reducing labor and postage costs. This will require the City to purchase a central fax server and update vendor master records to ensure the vendor has selected its preferred method of receipt for this information.

The City should also look into the features of the MUNIS Contracts module.

Key Finding Number 10: Payroll Process Time Input

Time input to the payroll process is gathered in a wide variety of ways, and entry of time occurs in several places, providing opportunities for error.

Time is gathered in a wide variety of ways in the city: time cards, time sheets, time clocks (transferred to Excel spreadsheets), and departmental systems. Time entry into the MUNIS system is decentralized for some City departments, and centralized for the School Department.

See Exhibits 13 through 15 for current payroll process flows.

Recommendation

The Center recommends the City consider a central payroll unit/department to enter time into the MUNIS payroll system; providing backup for staff, consistency in interpreting collective bargaining contract provisions and standard entry of time data. A larger unit/department would also be better able to handle the peaks and valleys that occur during the year.

The feasibility of direct import of time records into MUNIS Payroll from the Police/Fire "Perform" system should be investigated, eliminating the re-keying of time records.

The Center also recommends that in the longer term the City replace the current paper timesheet collection and time reporting processes with a Time and Labor Management System to allow direct, timely, straight-forward electronic capture of time worked and maintenance of accrual information. Gathering time directly from salary contract employees electronically rather than paying them on an automatic basis and then manually capturing and posting absences can more likely assure accurate time reporting and payroll expense. These systems place responsibility for time submission on the employee with an act to indicate their presence at work.

Key Finding Number 11: Systems Training

There is no ongoing training in the MUNIS system and other major software systems, and staff are not aware of full system capabilities. Training materials provided to new employees are dated, and training for new department heads is nonexistent.

Initial and ongoing training overall and specifically awareness of MUNIS and other key systems capabilities can improve operations. In several instances, departments are not aware of or not able to take advantage of software functionality (to improve operations) due to lack of training.

Recommendation

Training of new employees should use up-to-date materials.

The Center recommends the City establish a training program for new department heads and employees for the MUNIS system and other generally used software. This should include:

- Establishing a training area equipped with workstations linked to a MUNIS training database and other City-wide used software.
- Developing periodic training programs for new employees and for current employees for whom the City wishes to expand their current skills, or deepen their use of system features the employee currently uses. This will provide the opportunity to regularly reinforce knowledge, while also expanding the value the system can provide to the City by progressively expanding system use. Training can be delivered by department experts or "Super Users" – the subject matter experts in MUNIS or other systems.
- Implementing a system of quarterly MUNIS user discussions to provide two-way communication about the system, its challenges, and the improvements that should be pursued. These meetings can also provide the opportunity for employees to learn from each other in an informal setting by sharing challenges and lessons learned.
- Create training guides ("how-to" documents or include in procedure manuals) with color "screen shots" of actions before and after the end user interacts with the MUNIS system. These guides should include policy and operational standards wherever appropriate – the number of invoices in an accounts payable batch, procurement requirements, etc.

Key Finding Number 12: VUEWorks Software

VUEWorks software, installed in 2009, offers much capability and is not being used fully to the benefit operations, particularly Department of Public Works (DPW) operations.

VueWorks is in use at DPW, Central Services, and the MIS Department.

Recommendation

The Center recommends the City consider a re-implementation (including comprehensive training) of the software to access full capabilities and gain the benefits of this investment. Other municipalities that use the system more fully should be visited.

DPW:

- Devote the resources, obtain the training, organize the project, and fully implement the software to cover all work activities including equipment and vehicle maintenance.
- Investigate the asset-based features of VUEWorks (see below for related comments as respects Central Services).

Central Services:

- Consider having custodians enter service requests directly, rather than submitting paper forms.
- Include vendor-provided services to allow full reporting of work scheduled and completed.
- Use the actual date completed rather than the work order close date to reflect responsiveness (timeliness) to requests.
- Consider inputting labor and material against work orders (where appropriate) to track cost.
- Add significant assets (e.g., boilers, generators, roofs, air handlers) to the work order coding to gather statistics on work performed and underpin potential replacement plans. Also add current warrantee information for the above assets to alert staff of coverage.

MIS:

- MIS uses VueWorks to track service requests. Acquisition of help desk software may replace the functions supported by VueWorks.

Key Finding Number 13: GeoTMS Software

GeoTMS permitting software use varies and is not serving the needs of the City.

GeoTMS, the City's permitting software is being used to varying extents across the regulatory departments with much dissatisfaction expressed. A movement to seek a replacement has started.

Some of the issues expressed by end users were:

- Not intuitive, hard to use, older technology;

- Not used to print permits in some departments, “Easier to use Word”;
- Not integrated, no cross departmental access;
- No online application or payment ability;
- Limited end user reporting;
- No inspectional information; and
- Limited information captured, associated documents not integrated, information held in other files such as LaserFiche.

Recommendation

The City needs a solution to allow one-stop online application and fee payment, with all data related to the application contained in one place and integrated across all regulatory departments. The Center recommends a software search be done (see recommendation related to software search and implementation) with all affected departments involved in the process.

Key Finding Number 14: Voice and Data Communications Infrastructure

The voice and data communications infrastructure needs review and development of a comprehensive strategy.

The City has made a significant investment in fiber-optic links to all buildings, and a fiber connection to the Town of Amherst Data Center is in place; however, needs such as wireless access are not accommodated. The MIS Department is pursuing a state CIC grant for a regional sourcing of voice over internet and 911 systems/equipment.

Recommendation

The Center recommends the City develop a long range strategy for voice and data (including wireless) communication across the city.

Key Finding Number 15: Commercial Off the Shelf Software Selection and Implementation

There is no standard process for Commercial Off The Shelf Software (COTS) selection and implementation.

Recommendation

The Center recommends any software purchase being considered should be reviewed by the recommended IT Steering Committee to assure it fits in with long term goals and will integrate with the current mix of application software.

Also recommended is that a sponsor be designated for each project. The sponsor should provide high-level administrative and political support to the system, as well as a focus on its continued development and improvement.

Selection of software should include development of written requirements to be matched against product capabilities. Site visits to similar municipalities fully using the software (seeing it in actual use) are particularly valuable. Vendor demonstrations should not be a sole basis for understanding software product capabilities.

Every project needs a champion and project manager to drive the implementation, and a project team of key individuals from the affected departments.

A realistic project schedule should be developed with weekly status reports issued noting results accomplished the previous week, and issues and plans for the coming week. Regularly scheduled weekly team meetings are a must with an agenda published beforehand and with decisions/results/minutes published and sent to stakeholders.

Monthly updates to the Steering Committee and Mayor by the IT Director and project manager should be a requirement.

The IT Director should be the lead manager for implementation of application systems. The IT Director brings a special set of skills to the implementation of applications and should be playing a central role in deployment.

Key Finding Number 16: Town of Amherst CIC Grant

The Town of Amherst CIC grant-funded collaboration for hosting the MUNIS system and related cost savings is not defined. The feasibility of other sharing of facilities/systems with Amherst should be investigated.

The Town of Amherst (Lead) and the City of Northampton were awarded a 2014 Community Innovation Challenge Grant from the State of Massachusetts for Co-Location of Financial Management Software ($180,000). The basis for this would be that the Town of Amherst would host the MUNIS system for the City, rather than it being hosted from the Tyler MUNIS site in Falmouth, Maine. Transfer to Amherst hosting is slated for June 2015. Cost savings, potentially faster service, additional software features, and secure disaster recovery facilities are expected benefits. The Amherst data center is housed in the Police Department building with redundant backup power/air conditioning facilities and secure access, and it is linked to the Springfield State Data Center for redundant system and file backup.

Specific costs, resulting savings, and benefits resulting from the hosting arrangement have not been defined.

The City will still obtain annual support and OSDBA services from Tyler/MUNIS.

In the Center's meeting with the Amherst IT Director, he mentioned upgrading (to consolidate and standardize as stated in the CIC grant) the Northampton MUNIS system to the same level as Amherst (needs to be cleared with Tyler/MUNIS), making additional facilities available to Northampton. Included could be modules not currently included Northampton's suite of modules (e.g., Employee and Citizen

Self Service, Tyler Content Management and Permitting and Licensing). He also suggested the potential for merging phone systems and internet connection.

Amherst currently provides technical support to the Northampton Police and Fire Departments.

Recommendation

The Town of Amherst hosting arrangement related cost savings and other benefits must be defined. In addition, where appropriate, the City should consider other potential sharing of facilities/systems with Amherst.

Key Finding Number 17: RecTrac Software

RecTrac software offers much capability and is not being used fully to the benefit of operations at the Recreation Department.

Recommendation

Move forward to acquire and implement the WebTrac module to support online registration and payment. The MIS Department plan to move RecTrac to run on a central server will provide better disaster recovery facilities.

Training for staff is needed to understand and implement full use of the RecTrac system to allow scheduling, program cost tracking, and other capabilities to assist operations. Other cities and towns that use RecTrac should be visited to see how it is used.

Key Finding Number 18: My Senior Center Software

Use of expanded facilities of "My Senior Center" or the Recreation Department's RecTrac system will improve the program registration process at the Senior Center.

Recommendation

The Center should look into My Active Center.com, an offering (included at no additional cost) of My Senior Center software, which would allow online registration. However, it does not support tracking of fees vs. cost of programs/classes. Another option is to use the Recreation Department's RecTrac system which supports online registration and payment (currently in the process of being implemented at the Recreation Department).

SUMMARY OF END USER DEPARTMENT INTERVIEW RESULTS

Tax Collectors:

The Tax Collector's Office is responsible for collecting monies due to the City, including Real Estate, Personal Property, Motor Vehicle Excise Taxes, Parking Ticket Fines, and Water and Sewer Bills.

Real estate and personal property assessment information is provided by the CLT Universe CAMA System, which interfaces (via file transfer) with the MUNIS Real Estate and Personal Property tax modules. The MVE Registry file is abated by Assessors; then the file is imported into the MUNIS tax system. An outside consultant performs the file transfer/imports into the MUNIS system and billing (via MUNIS General Billing) for the Business Improvement District (BID).

The Deputy Collector is Arthur Jones Associates, a regional firm that prints and mails the tax bills. This is a solution that fits well, as the City has neither has the facilities nor staff to deal with the quarterly print and mailing volume, whereas Arthur Jones has capacity in both areas. There are approximately 12,000 real estate, 3,000 personal property, and 22,000 motor vehicle excise bills printed and mailed.

Mortgage banks email detail payment files, which Tax Collector staff import into MUNIS tax billing for application to the individual accounts. One bank continues to send copies of the tax bills (approximately 500) and a check; staff scan the bills into the MUNIS systems for application to accounts.

Citizens can pay online using the UNIBANK service via the City website. The City is also just starting to use a lock-box through People's Bank.

Water, Sewer, and the new Storm Water bills are handled through the MUNIS Utility Billing module.

Parking fees are processed in Tax Collectors; two people are involved in processing. The Complus System under a three-year contract is used for parking fee management. The Central Services Department picks up the cash from all locations.

Tax Collectors does the collection for a variety of departmental billings (so called "Departmentals," the individual departments issue the bills). Billing is done with a variety of formats, some in letter form:

- Pre-school tuition
- Sewer enterprise
- Cross connections (DPW)
- Trash bags (Sanitary Landfill Bags)
- Licenses (not permits)
- Literacy Center use
- Etc.

Departments forward paper invoices/bills to the Collectors Department, where they are filed awaiting payments. Payments received are matched to the pulled invoices/bills and are entered as miscellaneous receipt transactions to accounts in the MUNIS system. Payments are also manually posted to the Collector's copy of the invoice/bill and a paper spreadsheet by account type, which is matched

(balanced) by account to the MUNIS Payments Journal. If the billing involves multiple payments (e.g., monthly), a manual running open balance is calculated on the Tax Collector's copy of the paper invoice/bill.

The Tax Collector would like to be able to email copies of actual tax bills to constituents. However, since the bills are printed at an outside firm, images of the actual bills are not present in the MUNIS system. Currently, they make "screen-shots" of the MUNIS record (not an image of the actual bill), scan it, and attach it to an email.

The ability to email a report or screen image from the MUNIS system was lost when the City moved from Microsoft Outlook to Google Apps for Government Gmail.

The Tax Collector expressed the following: "There were no training materials with the MUNIS system; they had to learn it themselves, and they created their own instructions. I am concerned that there are probably many new features they are not aware of in MUNIS that would help the operation."

Auditors:

The City Auditor observed that the MIS Department is focused on hardware and offers limited MUNIS support. Calls to MUNIS support are not as helpful, because they are not aware of the City's specific setup. Concerns were expressed about periodic software patches/fixes applied, which are loaded without testing. Unstructured testing with new version upgrades is also a concern as the last upgrade was problematic for multi-year funds, taking eight months to correct. Hundreds of accounts were affected. MUNIS had an Excel spreadsheet import available to aid in the fix, but the Auditor's Department wasn't advised as to its existence.

The City Auditor would like to see:

- Standard roles setup in MUNIS to assign permissions and access, currently MIS checks with Auditors and Human Resources to set individual security/permissions.
- A MUNIS champion to spearhead movement into new modules e.g. Contracts, Purchase Orders and Fixed Assets. Training funded and time made available will support success.
- An in-house MUNIS expert.

Accounts Payable

The accounts payable process is decentralized at larger departments, where invoice batches are entered into the MUNIS accounts payable system. Contracts are issued in lieu of purchase orders, with larger departments having running accounts at various suppliers. Internal purchase orders are used in Smith Vocational, School, and Police departments. Seven hundred to 1,000 invoices are processed weekly. Invoices over a $1,000 are approved by the Mayor; the majority of volume comes from Schools, DPW, and Central Services.

See Exhibit 10 for a process flowchart of the current accounts payable process.

Payments are manually posted against a master list (spreadsheet) of contracts to track against approved dollar limits.

Nearing fiscal year-end, the purchase order function in MUNIS is used to encumber funds for invoices (departments send lists of affected invoices) expected to be paid from current year's funds but actually paid in the next fiscal year.

Purchasing

Operational purchasing (e.g., selection of vendors, product selection, bidding, etc.) is for the most part decentralized. The Chief Procurement Officer (CPO) states an estimated 7.3 equivalent (all part time) people are involved in procurement in the departments. The CPO is concerned primarily with reviewing modifications to the City's standard contract by departments, vendor setup review, larger contracts negotiations and setup, 30B compliance, communication of state contract options, and GASB 43 and 45 reporting, etc.

The CPO also manages all non-medical insurance, including worker compensation insurance for the City.

Committees or boards (e.g., Schools) require a majority of members to sign off on purchases exceeding $10,000.

See Exhibits 7 to 9 for process flowcharts of the current purchasing processes for purchases greater than $10,000.

Payroll

Auditors enters time in MUNIS Time and Attendance for smaller departments, reviews all payroll input, and initiates the check/direct deposit printing.

See Exhibits 13 through 15 for payroll process flowcharts.

Treasurers

People's United (Accounts Payable) and Florence Savings (Payroll) are the City's banks. Accounts payable positive pay files are sent to People's United. The MUNIS system is used for bank reconciliations.

Council on Aging/Senior Center:

The Center uses My Senior Center software (Cloud based/SaaS) to track use of the facilities and provide reporting statistics. People scan in and out of the Center and indicate their purpose for being there. The type of activity, number of participants, time of participation, etc. are recorded.

The Center does billing for facility rentals.

Program registration is currently done via manual sheets and payments are tracked on an Excel spreadsheet. The staff desires to automate the process, including the ability of seniors to register and pay online.

Assessors:

The assessing system is CLT Universe, a Tyler/MUNIS product. Real Estate Research Consultants, Inc. (RRC) are retained as appraisal consultants for approximately 1,600 accounts. The full time Principal Assessor is joined by two voluntary assessors. The City is currently looking at alternative assessing systems or services.

Outside consultants are retained to support the CLT Universe system and transfer of data to the MUNIS tax billing system. The Principal Assessor is very happy with the services provided by the consultants.

School Business Office:

Paper requisition forms are completed by the individual schools, approved by the Principal, and forwarded to the Business Office.

The Business Office creates and issues purchase orders via a Word document template. Color copies are printed: a white original copy is sent to the vendor, gold and green copies sent to the schools (the green copy serving as a receiving copy in central receiving at the high school). A yellow copy is retained in the Business Office. A Business Office staff encumbers the purchase in the MUNIS System. After the year end roll in September they encumber all anticipated fiscal year purchases. The purchase order numbers are signed by account ranges relating to individual Business Office staff.

Accounts payable batches are entered in the Business Office, an invoice proof is printed, the invoice originals are attached and forwarded to the Auditors department as part of a payment warrant. The payment warrant is processed monthly, a signature page is included with school committee signatures.

Central Hampshire Veterans Services District:

The primary systems used for department operations are obtained via the Virtual Gateway on the Mass.Gov website. Once a veteran is established in the system, required documents plus a bar-code sheet are forwarded to the state veterans offices in Boston to complete the application.

The department provides services for the veterans of 10 towns in the region and 170 veterans in the City.

Payments to veterans (City only) are processed weekly through the MUNIS accounts payable system where recipients are set up as vendors. Approved payment notices are sent to the other supported towns for payment there.

The Director desires to be setup in the MUNIS system as a backup to the Departmental Secretary.

Health:

The department uses Geo-TMS only for complaint tracking and permit form generation. The Director used Geo-TMS while working in Holyoke, where PDAs were used to capture data and pictures.

The Director commented:

- We pay for Geo-TMS by permit, including permits not used.
- There are no referrals to other permitting departments, no linking up, no inspectional information in Geo-TMS.
- There are no facilities for paying for permits online (payment only at the counter cash or check).
- Desires software built around permitting and inspectional services. Also need a tax payment notification (defaults, over dues) link.
- There is no department head training on systems when you join the city, no quarterly technology briefings as the Director experienced in other towns.
- Someone in an MIS should be driving improvement in this area.

Recreation:

The department uses RecTrac software from Vermont Systems running on a server in the department. They have had the software for 15 years but use very little of its capabilities, essentially using it only for registration. They use an Excel spreadsheet to account for fees. Programs are scheduled via a paper spreadsheet. They need training in order to understand how to expand RecTrac use. They will be visiting Amherst (an active RecTrac user) to get further insight into its use.

The department is looking to acquire WebTrac (from Vermont Systems), a module which allows online registration and payment.

They desire MUNIS training specifically for a department head; the Director has been here 11 years but no training was ever offered.

Time cards are used to capture time for all except permanent employees; supervisors review and approve and time is entered in MUNIS. Seasonal staff could have multiple timecards, depending on duties and associated rates.

They would like to see project code printed on the Auditor's time sheets (permanent staff time input).

Microsoft publisher is used for flyers.

Planning and Sustainability:

The department issues permits for Planning, Zoning, the Historical Commission, and the Central Business District, but not the Conservation Commission. There are seventeen permits issued by the city; DPW issues the infrastructure-related permits (e.g., sewer, water, storm water, driveway and curve cuts). Permit issuance typically involves a sixty day process; permits that must go through external boards can extend the timeframe. The application form is available online. Applicants check boxes for the type of permit, which opens a corresponding list of related questions to answer.

The department uses Laserfiche for storage of all documents.

GeoTMS is the system for permitting. Permitting in the City involves seven boards. The Building Inspector initiates the process, advising the applicant what permits are required. The department is looking to replace GeoTMS, as it served their needs well years ago, but they feel it has not kept up. Some of the deficiencies of GeoTMS mentioned were:

- No online access by module. Planning uses "Linkdoc" for online access which is linked to Laserfiche for document access, they consider this as a “band-aid.”
- “Not intuitive,” appears to use older “DOS Based” technology.
- Information not shared across departments, end users are restricted by module to their department (e.g. Zoning can’t see Planning data).
- Not integrated with Assessor data (needs outside consultant and MIS staff to add parcel data).
- Not integrated with GIS.
- Users can’t configure system to their needs, must call GeoTMS.
- Must create "Conditions" language in "Word" and then copy it into the GeoTMS permit form.
- Public can’t access and see all permits on a parcel, must call Planning to look them up.
- No direct mailing to “Abutters,” must determine in GIS and create in “Word.”

City Clerk:

The department relies increasingly on state-provided systems for many recording functions, using the Vital Information Technology System (VIT) for birth and burial permits. Starting in August, death records will also be accommodated in the VIT Systems.

Laserfiche is used to store marriage (1969 to present) and death records (1975 to 2014).

An Access database is used to link birth, death, and marriage records, and to generate marriage certificates.

GeoTMS is used for dog licenses, and it is considered non user friendly, as users must re-enter data for renewal licenses and step through multiple screens.

The department does contract filing and business certificates, and it files planning/zoning decisions.

They are concerned about phone drops with the VOIP phone system. The department is frequently the first line citizens call.

They would like to have a wireless printer – one that all staff can access.

Public Safety:

Both Police and Fire share the same system – “Perform” by TriTech Software Systems for Computer Aided Dispatch (unified), Police Record Management, Fire Record Management, Detective, Administrative, Outside Extra Duty Billing, Training Records, Equipment Certification (non-vehicle), and Cross Agency (data sharing). AmbuPro EMS software supports the ambulance operation at Fire.

IT application systems support is provided by an internal shared IT support person (Officer/IT Specialist). Technical IT support is provided by the Town of Amherst IT Department. The departments are very happy with the level of service, going it alone when the City MIS department did not provide the support needed.

See Exhibit 16 for a diagram of the Perform System linkages and Exhibit 17 for an inventory of Public Safety hardware and software assets.

Police

The Chief feels they should not be in the "purchasing business, it should be centralized." They issue their own purchase orders via a Word document. The Chief keeps track of payroll and purchase expenses on a spreadsheet, as there is no special reporting available.

Time is captured via daily Rosters (from Perform). Attendance is taken each shift by the supervisor or officer in charge, who notes absences, and then reviews and signs the sheet, which is then reviewed and approved by the Captain of Administration. "Differences" are entered into MUNIS Time and Attendance. Requests for Time Off and Extra Compensation are recorded on paper forms.

For the outside extra duty, billing and collection are handled by the Perform System, and officers are paid in MUNIS Payroll. The process requires entry of hours in both systems.

Fire

The "October snowstorm" tested emergency preparation, resulting in substantial investment by the City, including wireless access to the Perform system.

The Chief felt it is difficult to get reports out of "Perform." He would like to see better reporting.

Fire prevention is not linked to the Building Department; propane and liquor licenses are done in coordination with the Building Department.

"Truck-Tracker" software is used for large vehicle maintenance management.

Fire provides full ambulance service (5 units) for the city (6,000 calls annually, 80% resulting in transport) and uses "AmbuPro EMS" software (since 2000). Equipment on board the ambulances monitor vital signs and communicate while en route with hospitals. The system records full statistics about each call, and all calls are reviewed by the Deputy Chief of EMS. Fire engines are also licensed as paramedic engines and can perform assessments and start IVs until paramedics arrive. Ambulances have laptop computers and printers installed, incidents are entered into the system there, and a report is provided to the hospital upon arrival. Hospital "Fact Sheets" are scanned into the system and attached to the call record by the Deputy Chief of EMS. Upon return to headquarters, the Ambu-Pro system is re-synchronized with the server.

Call records are exported from AmbuPro to Coastal Medical Billing, Inc. for billing and collection; funds are deposited to "Unibank." Coastal defines the charges and fees, and assesses a 3.25% charge based on fees billed. Coastal statements are sent to Treasurers; the collection rate is running at 92-94%.

An issue with Florence Station based units is that they must return to headquarters to synchronize with the AmbuPro system.

Small OED (Outside Extra Duty) billing and collection is handled by the department secretary using Excel.

Time is captured in "Perform." Results are printed out by shift daily and approved. A bi-weekly list is approved by the Chief and entered into MUNIS by the Department Secretary.

Further training in the use of "Perform" to fully use its capabilities is desired.

Human Resources:

Human Resources (HR) is centralized, serving both the Schools and the City, with 550 employees in the City and 650 in the Schools.

Human Resources enters time into the MUNIS Time and Attendance system for the School Department.

The Director shared the history of MUNIS in the City. It was purchased in 1992, and two years thereafter the schools drove implementation with a focus on not affecting existing school procedures. An in-house expert in MIS customized it extensively and then passed away. Four to five years ago the system became unpredictable (e.g., for 18 months HR had to check accruals every week), until a MUNIS consultant was brought on board to reinstall the system. Currently the most knowledgeable person about the MUNIS system is at Smith Vocational High School.

The Director was concerned that no one owns the MUNIS system, and nobody maintains it. With version upgrades, nobody knows what is changing; hundreds of pages of documentation on the new version are provided with no guidance from MIS. If something goes wrong, everybody calls MUNIS support directly, with no filtering by the MIS department.

Improvements in the use of MUNIS for consideration:

- Tried using MUNIS position control in the past, without training could not make it work; school department jobs breakdown being the major issue.
- Consider workflow use, this potentially could be very helpful with personal action forms.
- New employee applications are made through the City website, then all information has to be re-entered into MUNIS, would like to see it directly captured in MUNIS.
- Would like to see a review of the security method in MUNIS, currently controlled by MIS.
- CORI and license certifications are recorded in MUNIS and HR is considering using the sick bank function.
- Check stubs do not print beyond 10 lines of pay types; there is no overflow or second page.

Ninety percent of employees are on direct deposit, except for one group in DPW that still receives checks.

The role of MIS is very limited. There is no guidance provided and no understanding of what are the critical functions that need addressing in the City. The Director does not act as an advocate for IT and its use in the City.

They are concerned that at times they have no phones or network access for days.

Payroll

The Director was concerned about payroll time entry, since few departments submit timecards, only DPW uses time clocks, and staff not completely conversant with the provisions of the collective bargaining agreements are deciding what should be paid.

Deduction vendors are paid by payroll checks (e.g., disability, flexible spending, deferred compensation), wire transfers (e.g., GIC, Medicare part B), and A/P checks (e.g., dental, other insurance).

HR processes (enters into MUNIS) the school payroll. Payroll is bi-weekly, with a Sunday to Saturday pay week. Attendance spreadsheets (including teacher substitutes) are received from each of six schools daily. For most employees only absences are posted; hours are posted for substitute teachers and cafeteria workers. Time cards are received from everyone but teachers; time cards are created in HR for substitutes from the daily attendance spreadsheet. Schools send timecards and Requests for Stipend Payments to HR by the Wednesday prior to payroll closing; any changes during the Wednesday to Saturday period are emailed or faxed to HR. HR tracks family leave medical time via spreadsheet.

See Exhibit 13 for School Payroll process flow.

Department of Public Works:

Divisions include water and sewer, parks, cemetery, engineering, administration, solid waste, and the transfer station.

The enterprise asset management/work order system is VUEWorks (via the Web), currently implemented for potholes, tree trimming requests, and snow plow damage. Limited application is due to lack of staff resources to devote to implementation (storm water project currently tying up resources) and inadequate training. The Director would like to see VUEWorks used for vehicle/equipment work orders and asset management, and would like to have tablets to gather information in the field (e.g., water tie valves, catch basins and manhole inventory).

Three laptops and air-cards were recently approved for purchase.

Citizen-generated work orders come in through the City website. From these, DPW staff review and generate work orders. The street superintendent assigns the work and prints out a work order for the crew to complete, and the labor and material involved is posted.

AutoCad is used for infrastructure drafting.

The department had a consultant working with them for 20 years, ending this May, providing IT and network administration. A network support person from the MIS department has been assigned and has been phasing in during the past year.

The Director would like to see a one-stop permit application process linked to the Building and Planning Departments.

MUNIS Utility Billing module is used for Water and Sewer billing.

Arc-GIS (ESRI) is the GIS software used. Extensive GIS layers are in place supporting the City sewer, water, and recently storm water infrastructure. Older plans have been scanned in and indexed for access. They would like to see more timely update of parcel data rather than periodic updates.

Employee time for the 84 full time (plus seasonal) staff is gathered via time clocks, the results of which are entered into an Excel spreadsheet by the Superintendent and combined with overtime and time off slips, then entered into the MUNIS Time and Attendance system. A printout of the Excel spreadsheet is matched to the MUNIS Deduction Proof report and forwarded to the Auditors Department.

License Commission:

Annual renewal notices are sent to license holders prior to November 1st, and a commitment sheet is sent to Collectors to alert them for fees due. Copy of the Collector's receipt provided licensees notifies the department of payment. Overdue fees are billed via a Word document to licensees.

At year end, once the majority of fees are received, renewal payments are entered in GeoTMS. (No billing is done from GeoTMS.) Staff felt GeoTMS is cumbersome to print licenses and instead use Word to generate the documents. GeoTMS won't allow change to DBA, so they must re-enter under a new number. GeoTMS reporting by license type doesn't foot the columns, so they must do so manually.

Finance:

The Director would like to see a full centralized purchasing function in place with centralized bidding and use of MUNIS Purchase orders for automatic encumbrance. What purchasing (sourcing) efforts are occurring in the departments must be determined.

Also would like to see a centralized payroll unit/department, providing backup for staff, consistency in interpreting contract provisions, and standard entry of time data. A larger centralized department/unit would also be better able to handle the peaks and valleys that occur during the year.

The Director agrees with the Human Resource Director on the value of labor collection systems, where people take an action to indicate presence at work rather than after the fact entering exceptions to full attendance.

Although the Director is happy with the current process where departments submit budget requests by spreadsheet, it may be worth a look at MUNIS budgeting.

Building Commission:

Four thousand permits are issued annually, there are 11,000 properties in the City. The department also handles building, zoning, and electrical permitting for the Town of Williamsburg.

Applicants can start the application process online by answering a series of questions (checklist) and can print out the application(s) for submission. The process starts at the Building Commission, and the Building Commissioner directs the overall process, reviewing the application and advising applicants as

to what permits and departments are involved. Eighty percent of the applications come in with plans attached.

The department accepts fees by check only and forwards them to Treasurers.

All documents are stored in LaserFiche by parcel and map.

GeoTMS is the permitting software in use since 1999. All permits are printed from GeoTMS and the enforcement module is used. Paper inspection forms are used, and the results entered into GeoTMS. Some of the issues expressed with GeoTMS are:

- Difficult to use, not intuitive ("Clunky").
- No end user reporting.
- No or limited access to other permitting department modules/information, not integrated.
- Do use the notification feature but don't know how to turn it off.
- Can't attach associated documents.
- Periodic inspections are not a scheduled, must be done manually.
- Must supplement GeoTMS by storing information in other department databases.
- Public record requests are difficult to satisfy as information must come from a variety of sources: GeoTMS, LaserFiche and other databases.

Staff access multiple maps: DPW (2009 data), State GIS Maps (slow access, good quality), Google Earth, and the Emergency Services Overlay.

They are concerned about Assessors data, and they need more frequent updates, particularly on ownership changes.

The internet speed is slow and loss of a laptop for access is affecting the department.

The City's move to GMail (not an Outlook/Exchange server) prevents the ability to email documents from GeoTMS or MUNIS applications. They must print documents to a PDF rather than email a report or screen image directly.

Central Services:

Central Services provides building maintenance for 23 City and School buildings and electrical/HVAC support for 7 DPW buildings. The staff of 50 includes 35 School and 7 City custodians.

VUEWorks is used to track work orders. The system was installed in 2009 and is run from a server at DPW. Custodians (approved by Principals or Department Heads) send/fax paper Work Request Forms or phone in requests for service which are then entered into VUEWorks in Central Services. The Work Ticket Report ("Work Order Summary by Employee") is used by tradesmen who work down the list of orders. Labor or material is not tracked on the orders, nor are vendor provided services included.

The Director feels that VueWorks is capable of doing more, that they currently use very little of its capabilities, and that they need training and time to expand its use. They are very interested in looking into using it for preventative maintenance. They received limited training during initial installation,

resulting in issues and problems, and they would like to have someone from VUEWorks on site for training.

The department centrally buys and inventories custodial and office supplies for the City and Schools. Departments send in requests (via a requisition form) to School Office Storage from which supplies are issued. They would like to see weekly requests to reduce the number of small orders.

Employee time is entered on bi-weekly "Central Services Time Cards" (signed by the employee and supervisor) and then posted to the "Payroll Timesheet" report received from IT which is then signed by the department head and forwarded to Auditors. Additional hours are recorded on an "Additional Hours Documentation and Authorization" form and signed by the employee and department head/mayor.

Purchases (frequent and repetitive) are made using open accounts at vendors who bill the department monthly.

Staff expressed concerns that at times network and file serving speed is slow.

Department oversees energy use by an energy management system for 28 buildings as part of an aggressive city energy use program.

EXHIBITS

Exhibit 1 - MIS Computer Center/Redundant Storage at Fire Headquarters/DPW Hardware

MIS Center			
Name	**Model**	**OS**	**CPU**
AV	VMware	Windows Server 2008 R2 Datacenter, SP 1 (64-bit)	Intel(R) Xeon(R) CPU E5645 @ 2.40GHz
COA-SERVER	ProLiant ML150 G5	Windows Server 2003, Web, SP 2 (32-bit)	Intel(R) Pentium(R) III Xeon processor
DC1	VMware	Windows Server 2008 R2 Datacenter, SP 1 (64-bit)	Intel(R) Xeon(R) CPU E5645 @ 2.40GHz
DC3	PowerEdge R510	Windows Server 2008 R2, SP 1 (64-bit)	Intel(R) Xeon(R) CPU E5620 @ 2.40GHz
DOORCONTROL	VMware	Windows Server 2008 R2 Datacenter, SP 1 (64-bit)	Intel(R) Xeon(R) CPU E5645 @ 2.40GHz
FINANCE	PowerEdge R510	Windows Server 2008 R2, SP 1 (64-bit)	Intel(R) Xeon(R) CPU E5620 @ 2.40GHz
HR-PAPERVISION	OptiPlex 380	Windows 7 Pro, SP 1 (32-bit)	Intel(R) Core(TM)2 Duo CPU E7500 @ 2.93GHz
OPENCHECKBOOK	VMware	Windows Server 2008 R2 Datacenter, SP 1 (64-bit)	Intel(R) Xeon(R) CPU E5645 @ 2.40GHz
PRINTSERVER	VMware	Windows Server 2008 R2 Datacenter, SP 1 (64-bit)	Intel(R) Xeon(R) CPU E5645 @ 2.40GHz
VCENTER1	VMware	Windows Server 2008 R2 Datacenter, SP 1 (64-bit)	Intel(R) Xeon(R) CPU E5645 @ 2.40GHz
VEEAM1	VMware	Windows Server 2008 R2 Datacenter, SP 1 (64-bit)	Intel(R) Xeon(R) CPU E5645 @ 2.40GHz
W2K3-TS	VMware	Windows Server 2003, Enterprise, SP 2 (32-bit)	Intel(R) Celeron(R) processor
WSUS	VMware	Windows Server 2008 R2 Datacenter, SP 1 (64-bit)	Intel(R) Xeon(R) CPU E5645 @ 2.40GHz
Redundant Storage at Fire			
Drobo1, Drobo2, DroboSan	B880i, B800i, B1200i	Redundant Storage Units	Drobo/Linux
DPW			
VUEARC	ProLiant ML310e Gen8	Windows Server 2012 R2 (64-bit)	Intel(R) Xeon(R) CPU E3-1240 V2 @ 3.40GHz
VUEWORKS	123456789	Windows Server 2003,, SP 2 (32-bit)	Intel(R) Xeon(R) CPU 5140 @ 2.33GHz
WIN0	ProLiant ML330 G6	Windows Server 2008 R2, SP 1 (64-bit)	Intel(R) Xeon(R) CPU E5502 @ 1.87GHz
WIN2	ProLiant ML150 G6	Windows Server 2008 R2, SP 1 (64-bit)	Intel(R) Xeon(R) CPU E5506 @ 2.13GHz
WIN4	ProLiant DL380 G5	Windows Server 2008 R2, SP 1 (64-bit)	Intel(R) Xeon(R) CPU 5140 @ 2.33GHz

Exhibit 2 - Systems Integration Diagram 1 (overall)

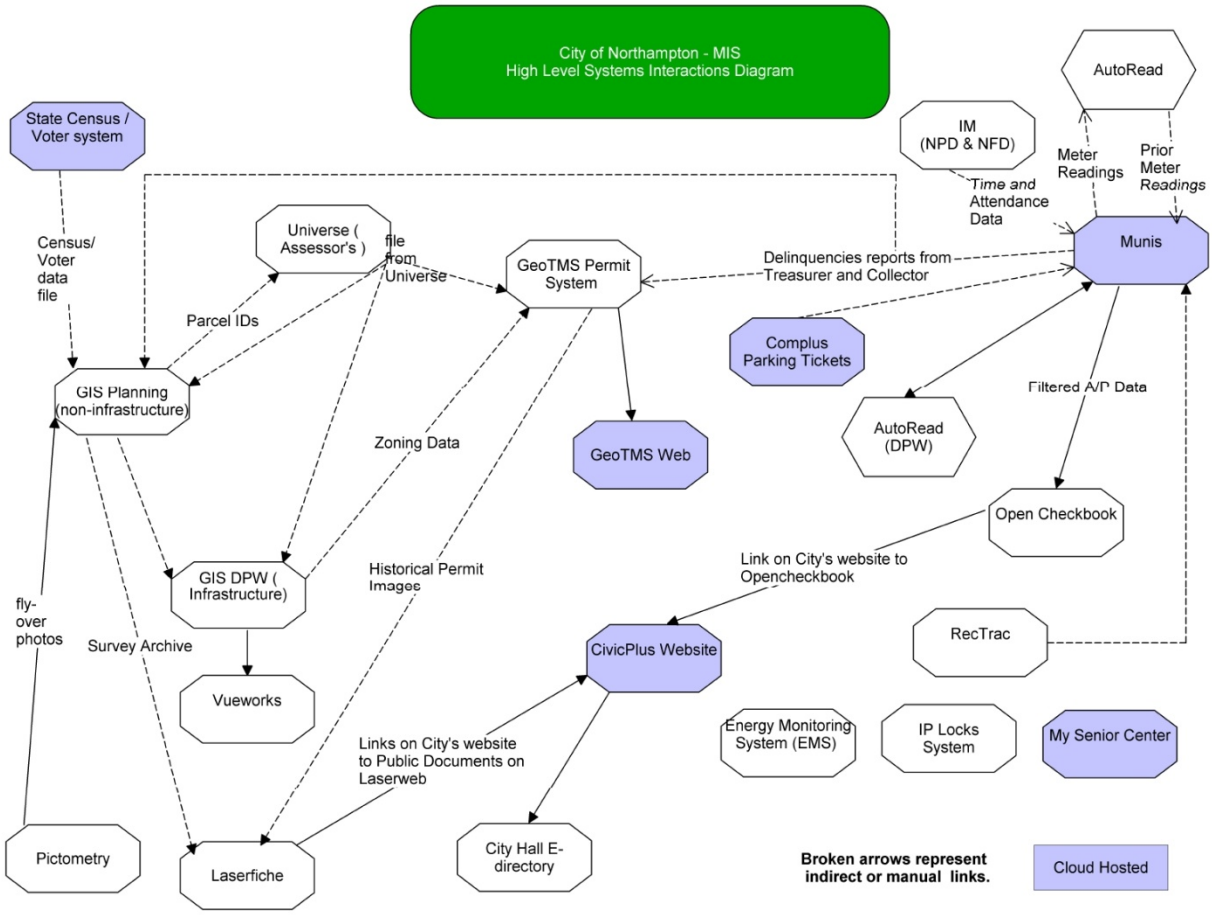

Exhibit 3- Systems Integration Diagram 2 (MUNIS related)

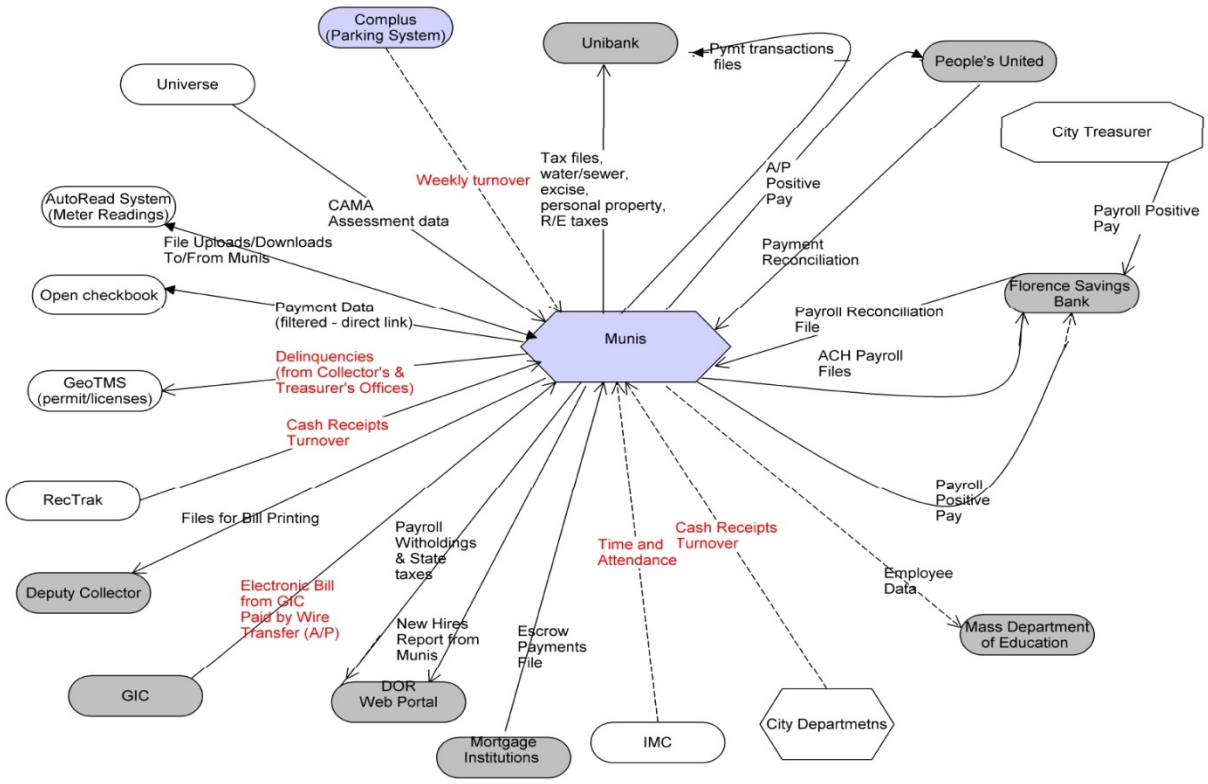

Exhibit 4 - Network

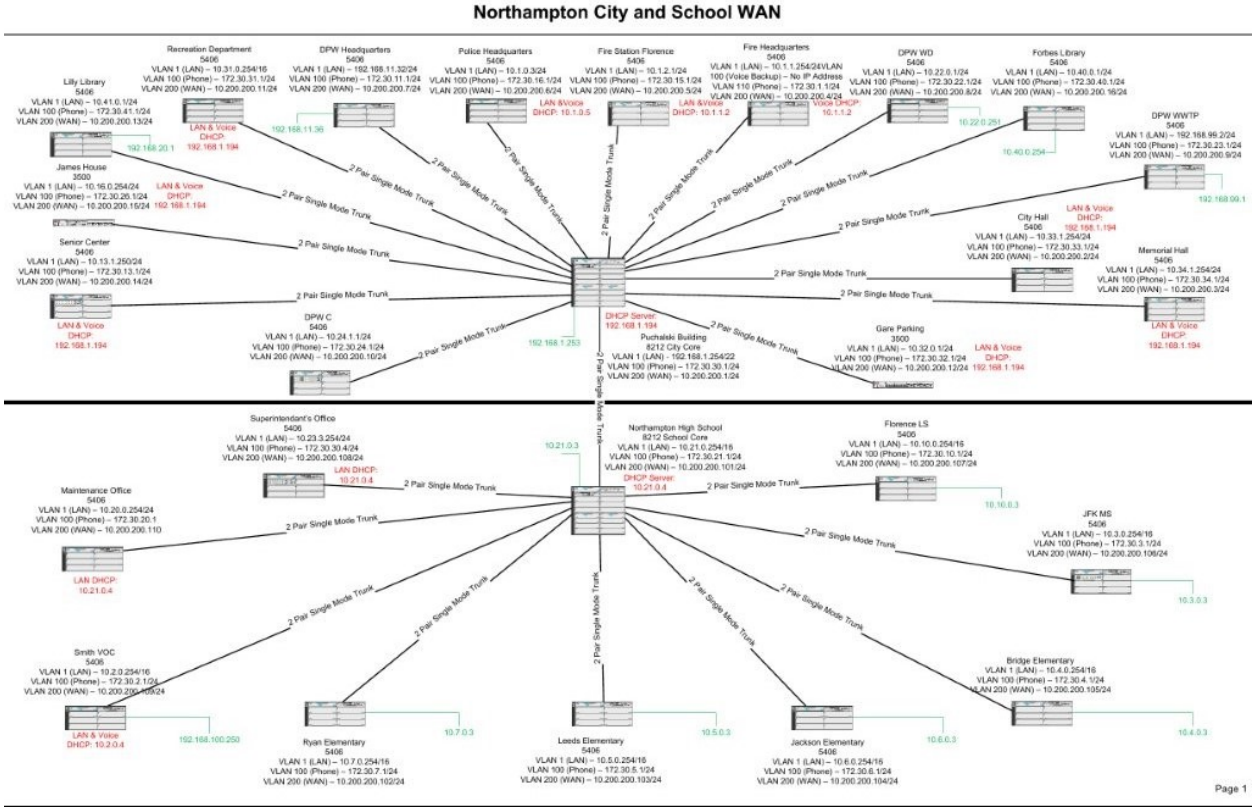

Exhibit 5 - MIS Disaster Recovery Facilities

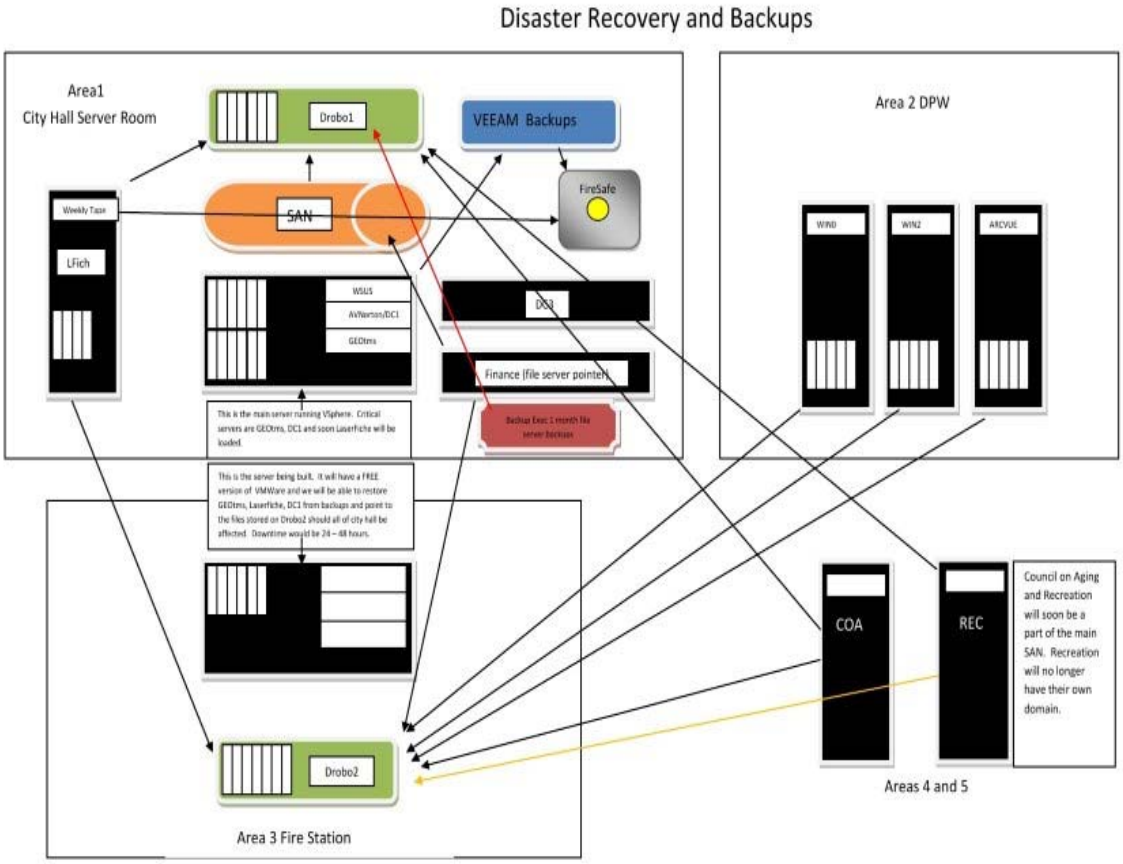

Exhibit 6 - Current Disaster Recovery Measures

Current MIS Backup/Disaster Recovery Provisions

I. MUNIS - Financial System

A. Servers Backup and Recovery - Hosted on the cloud at Tyler's hosting facilities. The City's agreement includes backups and DR.

B. Internet access – There is one dedicated Internet line for Munis cloud access. In case of problems with this line, key users can switch to Tyler's hosting VPN client to access Munis via the general use Internet line. MIS has a verbal agreement with the IT Director for the City of Westfield to use their facilities for Internet access, for Munis purposes, if needed. This will be for a limited number of users for running checks, for example.

C. Printers for Checks and Utility Bills – MIS has a printer for printing payroll and A/P checks. Another printer at MIS is used as a backup for printing checks, if the main one fails. The printers at MIS are backups to the one at DPW, for utility billing printing purposes.

II. LaserFiche – Document Management System

A. Backup and recovery - LaserFiche is a very large Database OCR and Tiff storage system. Backups are done to a local SAN and the remote SAN at Northampton Fire Department. To recover restore the system backup from the Drobo at the fire station or the local Drobo to the VEEAM1 machine on a virtual server. The SQL data and the storage drives can reside either there or externally. The drives will be restored directly and the SQL data from the .BAK files that matches the day the drives were backed up.

III. W2k2-ts - Terminal server, GeoTMS (Permit and License System) server

A. Backup and recovery - A full backup of this server is done every night on VEEAM1 (a virtual server with external attached storage for backup. The backup drives are rotated to the fire safe every day. There is a separate Daily Backup to Drobo1, a SAN, with a system backup.
This machine will be restored from the VEEAM1 backup or alternatively from the daily and system backup to a new server platform.

IV. City File Server – User Shares File Server

A. Backup and recovery - The file server for this is the server named "Finance". A backup of the shares on the Equallogic SAN are copied nightly, weekly and monthly to Drobo1 and Drobo2.To restore these files in the event of a system crash: write a log

on script to point everyone to the stored drives on either Drobo. The Drobo would then act as the temporary server until a new SAN is procured and set up.

V. DPW Windows servers

A. Backup and recovery for Win0, Win4 - These two servers are backed up to each other and backed up to the Drobo2 at the fire station. There are Baremetal backups for each of these servers on Drobo2. All the data is backed up to Drobo2 nightly, weekly, and monthly.

Restore from Baremetal can be done to a compatible server at the DPW. The user's drives can simply be pointed to the Drobo at the fire station until the new file server is established.

All the servers at the DPW are also backed up on a Linux system with tape rotation schedule.

VI. Recreation Sever

A. Backup and recovery – This server is backed up to Drobo1 and Drobo2. Its main function is the run Rec-Trac and act as a file server for the Recreation Department. This server would have to have RecTrak reinstalled then the back up of the database restored.
The Recreation Department files would be pointed to on the Drobo1 or Drobo2.

VII. COA

A. Backup and recovery – This is a basic file server and its files are also on drobo1 and Drobo2. In case of failure, a PC can be setup to act as the file server. The files to the new file server will be restored from the Drobo backup.

VIII. HR-Paper Vision

A. Backup and recovery -- Bare metal backup on dc3 can be restored to any PC and then have the external drive attached.

IX. MIIA Disaster Recovery Opportunity -The MIS department wishes to participate in the MIIA disaster recovery program recently brought to the MIS director's attention. This was brought up to the attention of the person completing the community profile required survey.

Exhibit 7 - Current Purchasing $10,000 to $25,000

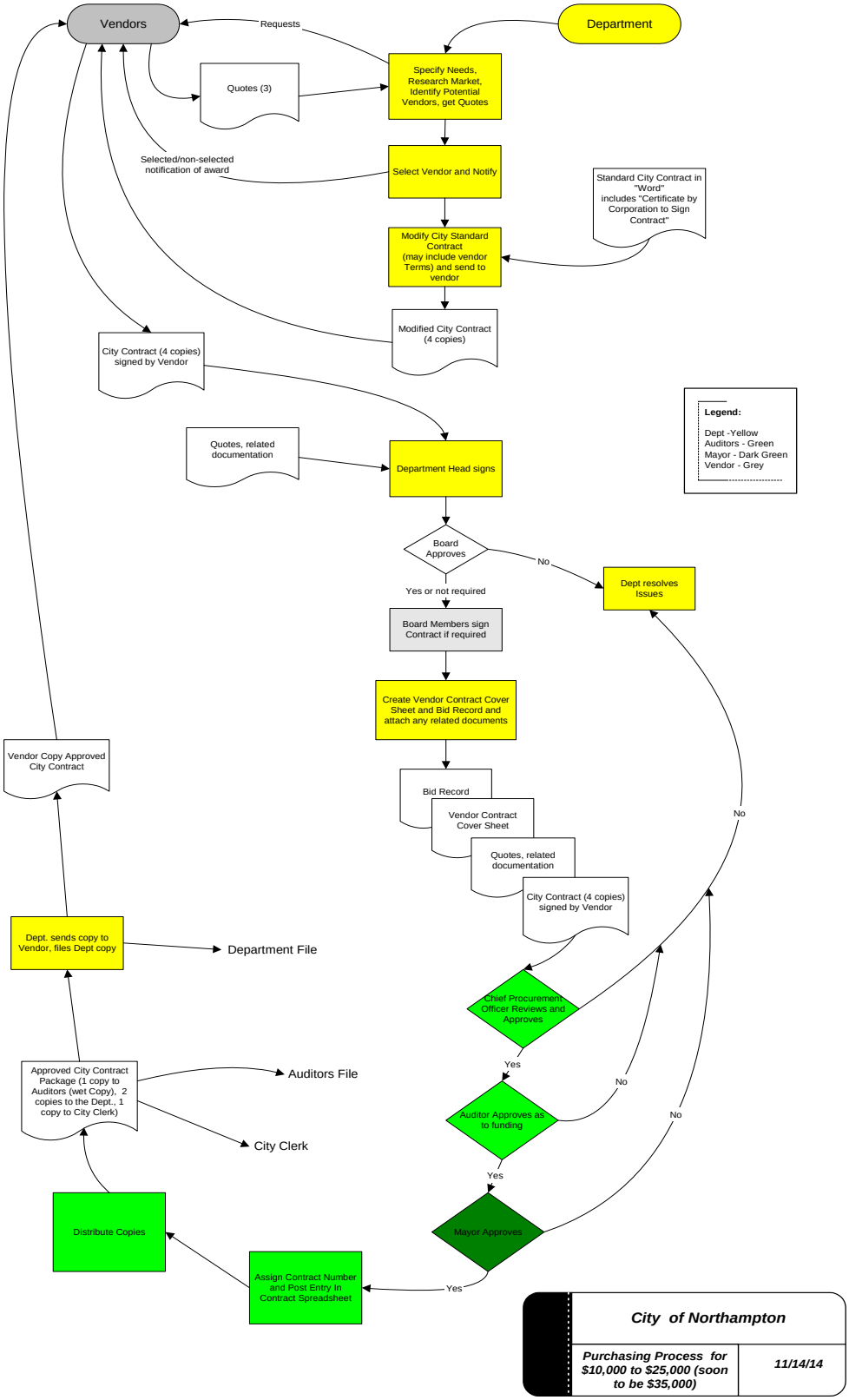

Exhibit 8 - Current Purchasing greater than $25,000

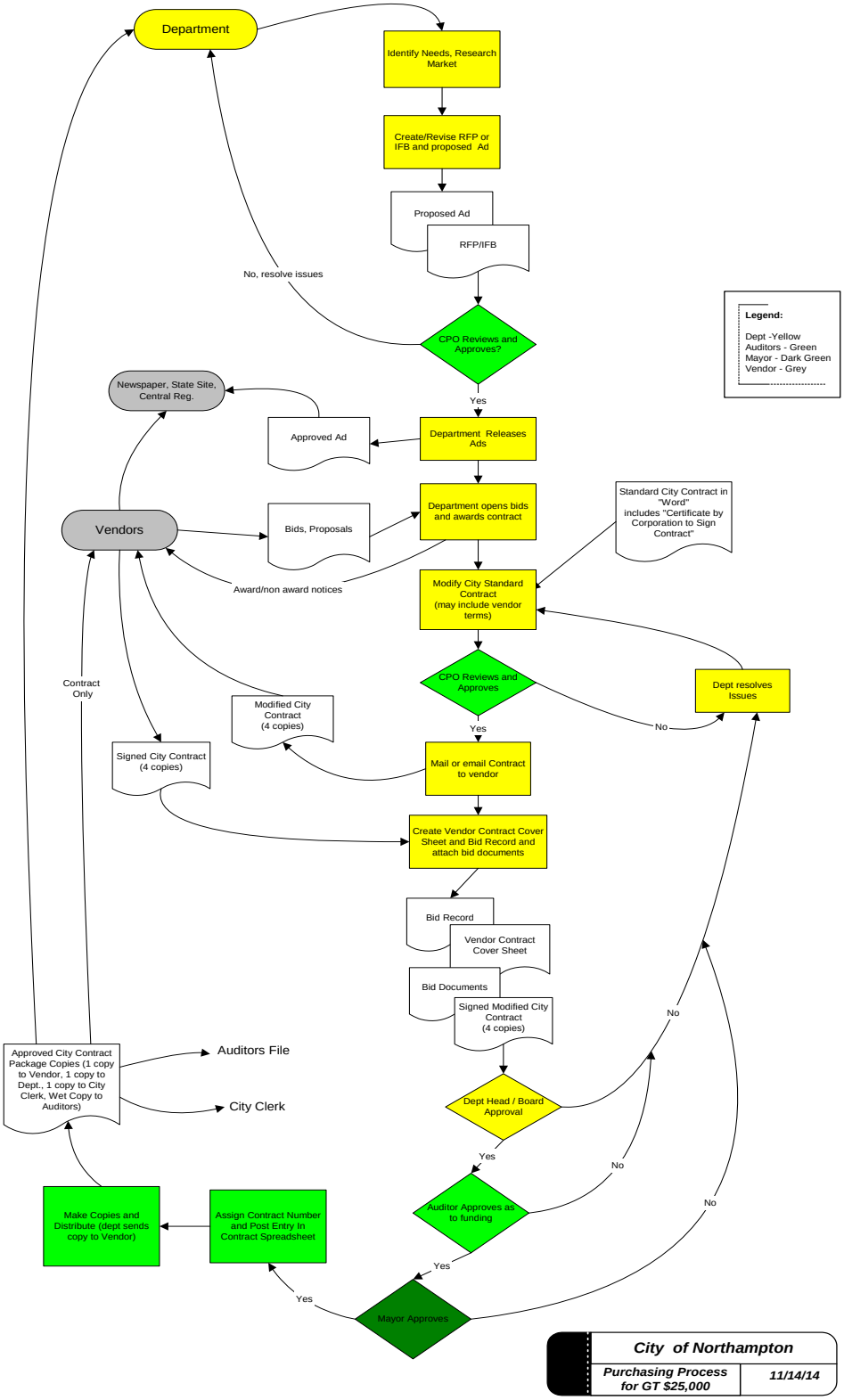

Exhibit 9 - Current Purchasing State Contact or Cooperative.

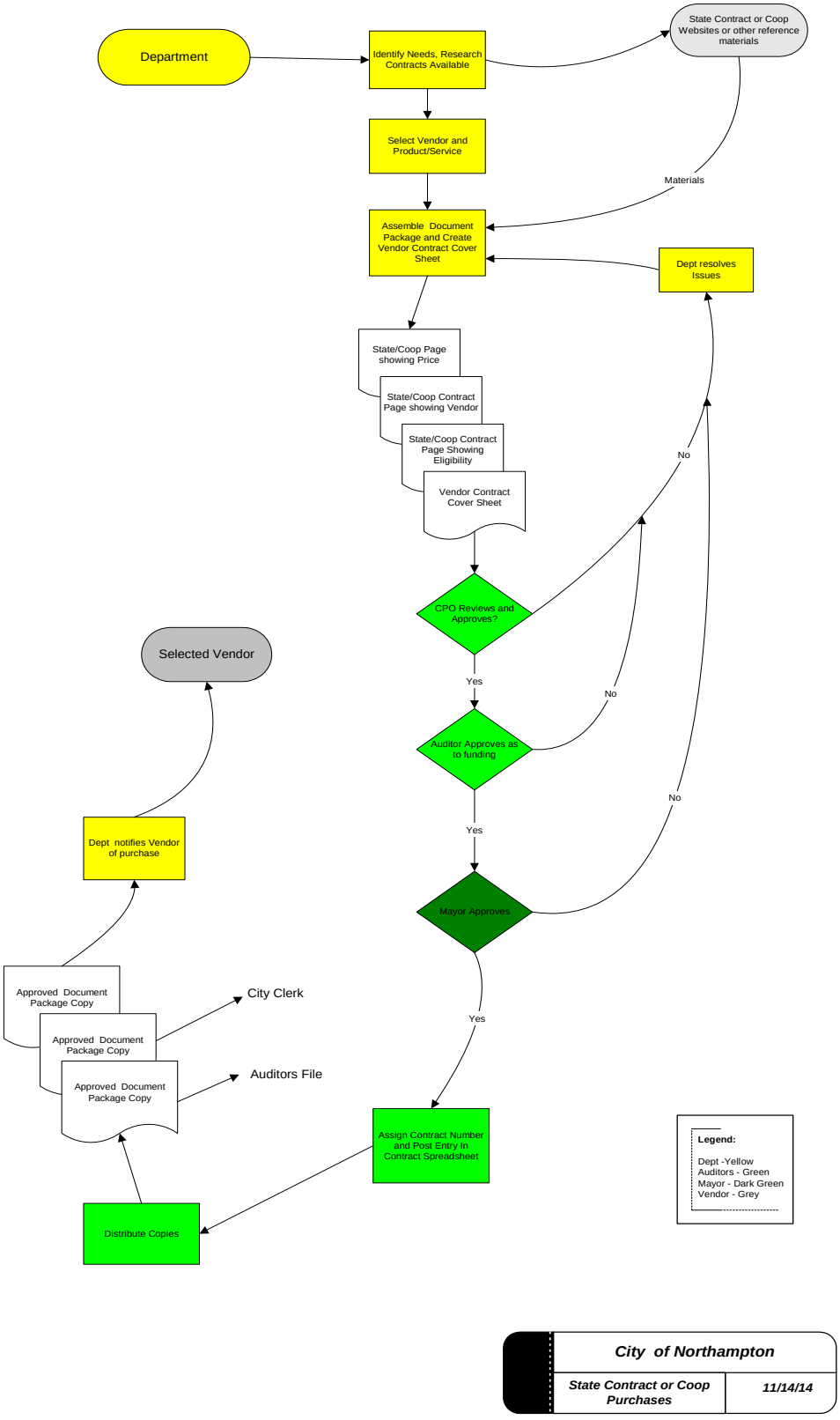

Exhibit 10 - Current Accounts Payable Process

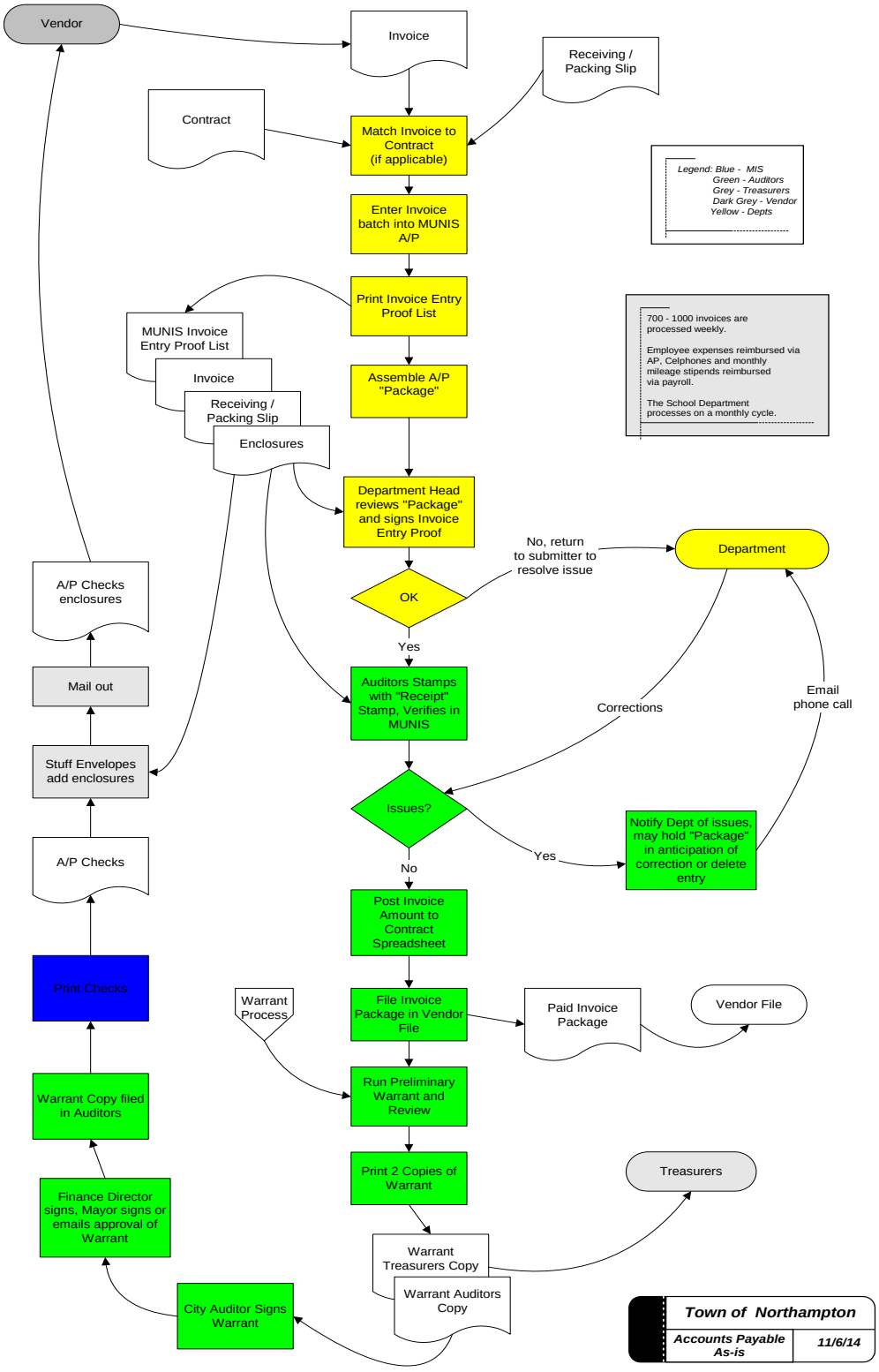

Exhibit 11 - Potential To-Be Process Purchasing

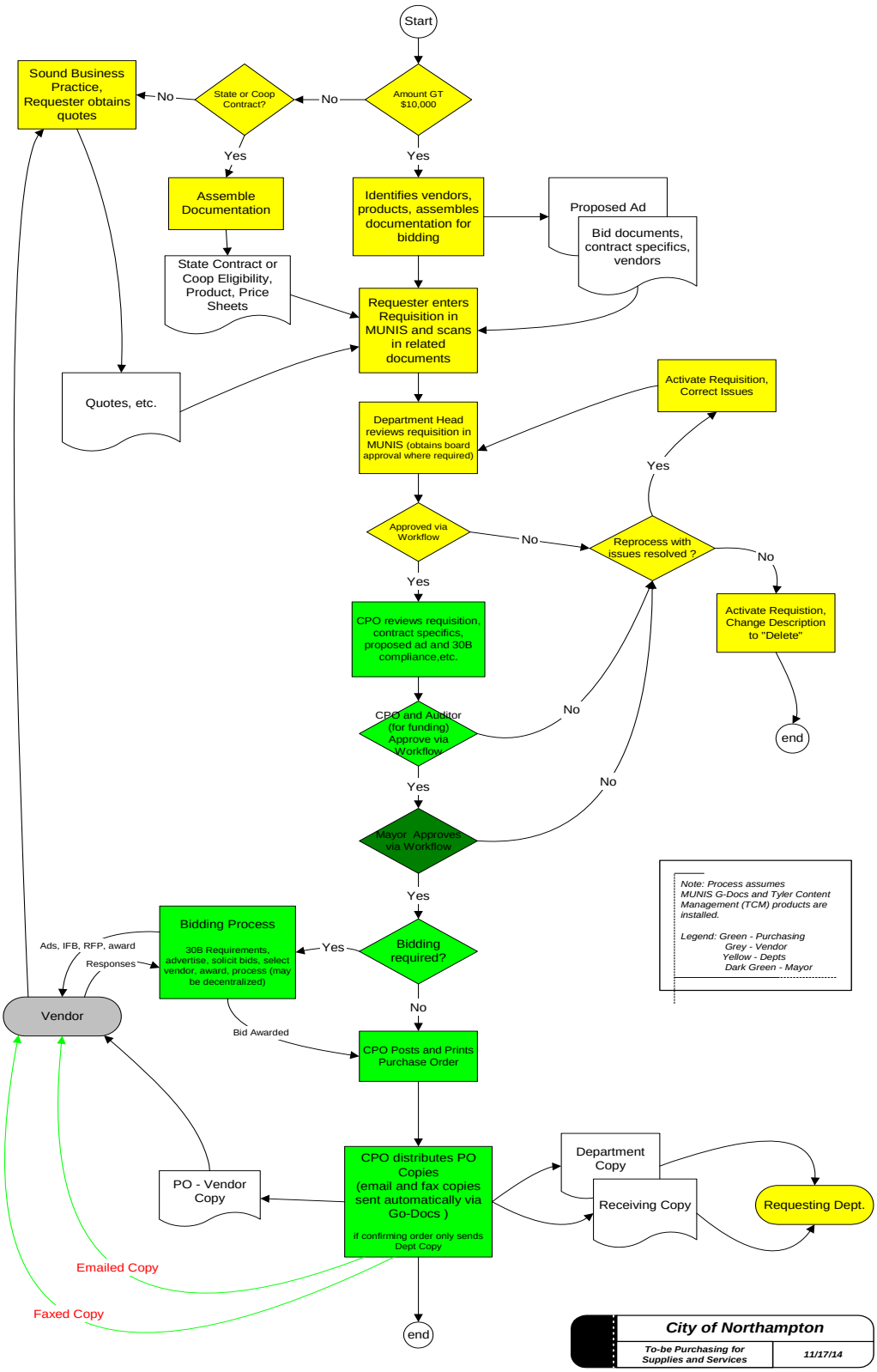

Exhibit 12 - Potential To-Be Process Accounts Payable

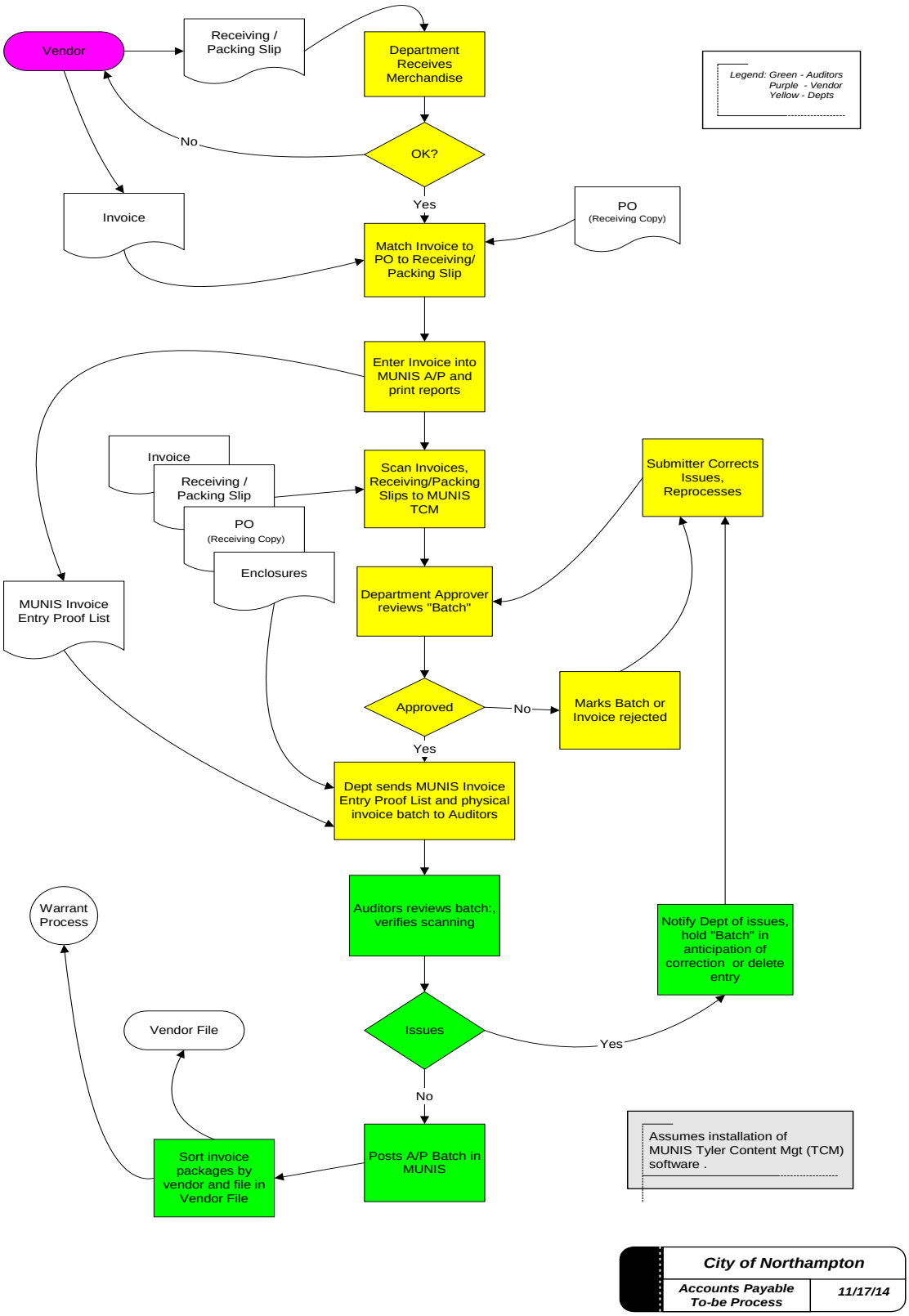

Exhibit 13 - School Payroll Process

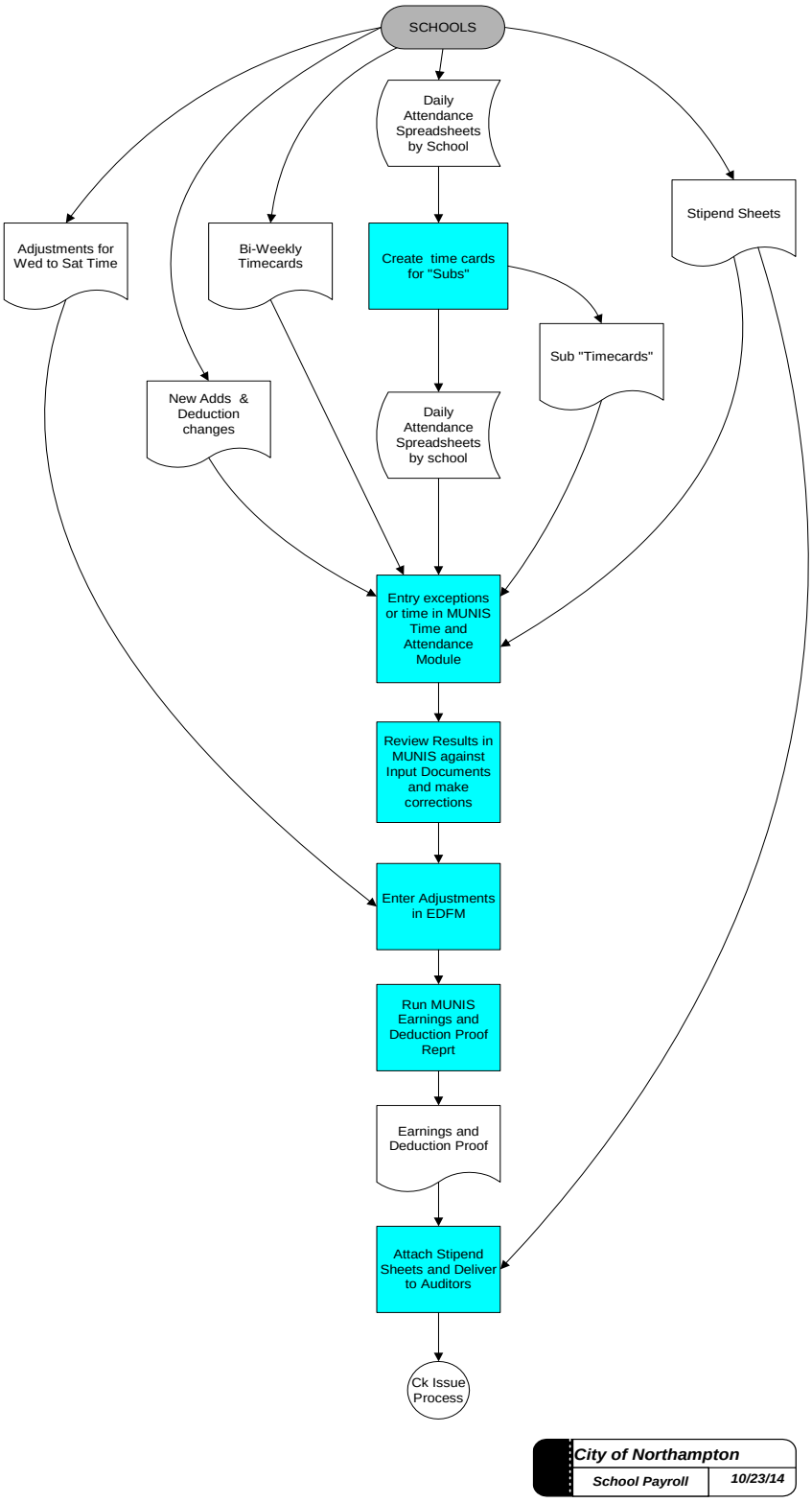

Exhibit 14 - City Payroll Process

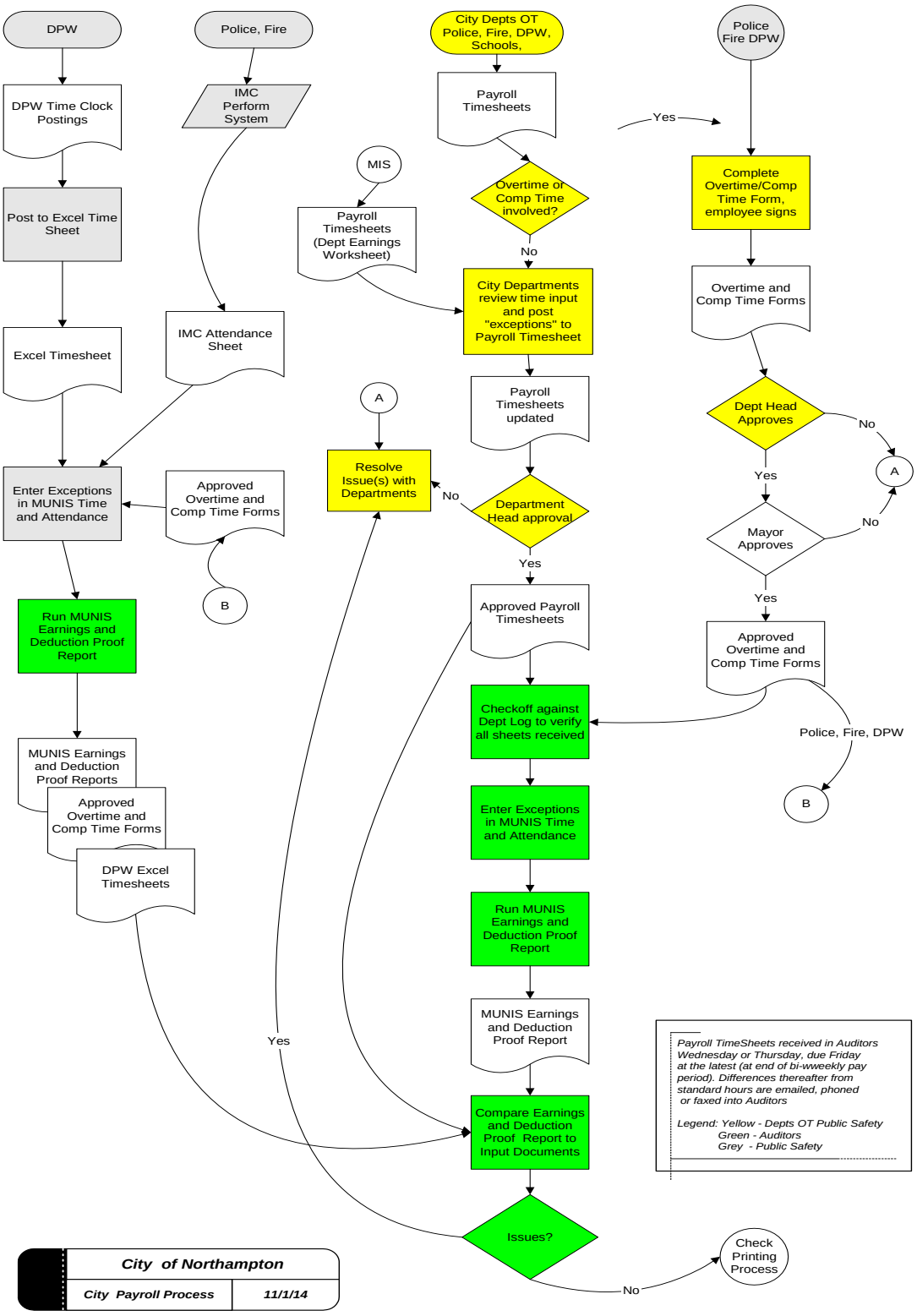

Exhibit 15 - Payroll Check Printing Process

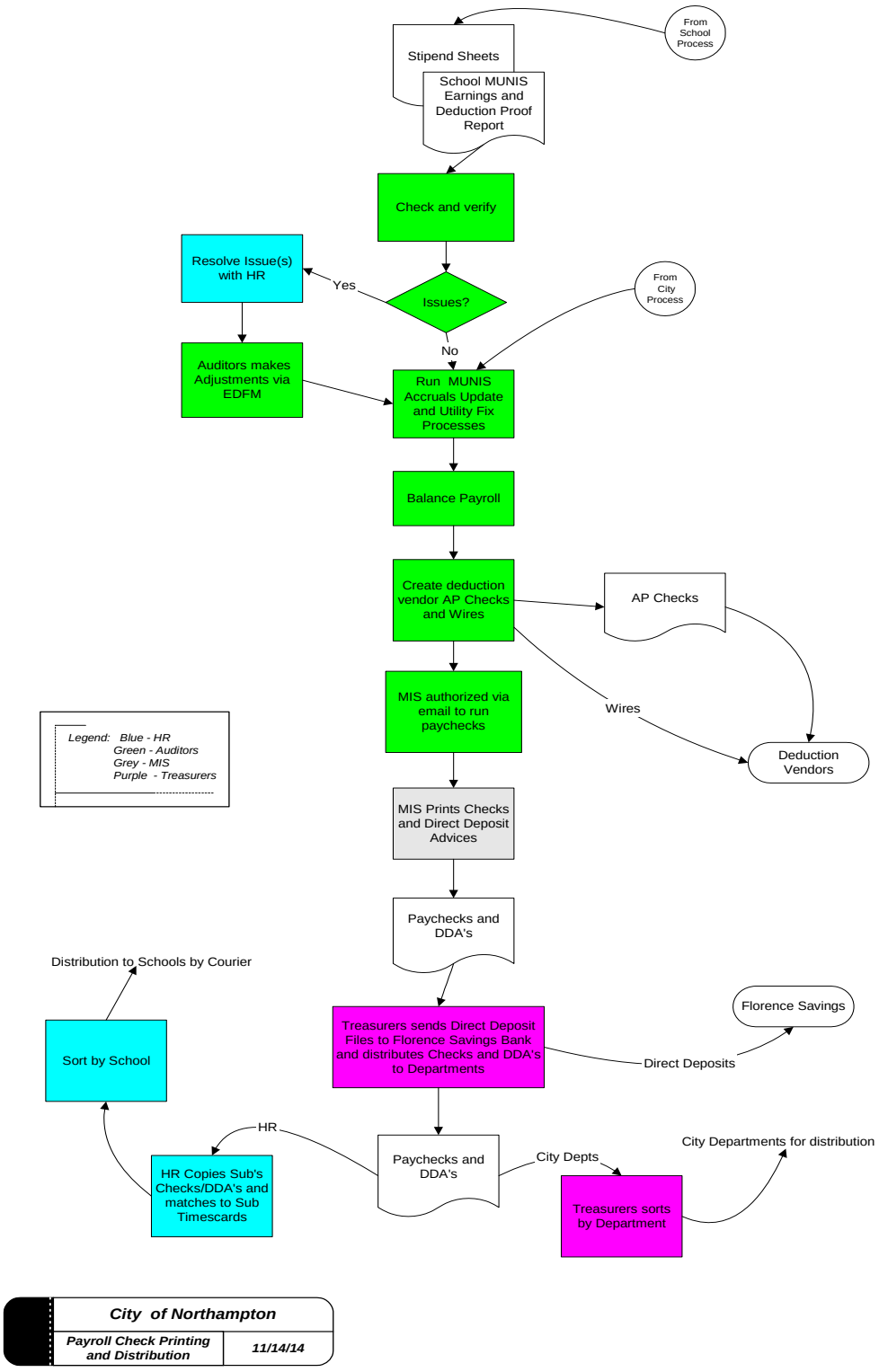

Exhibit 16 - Perform System Linkages

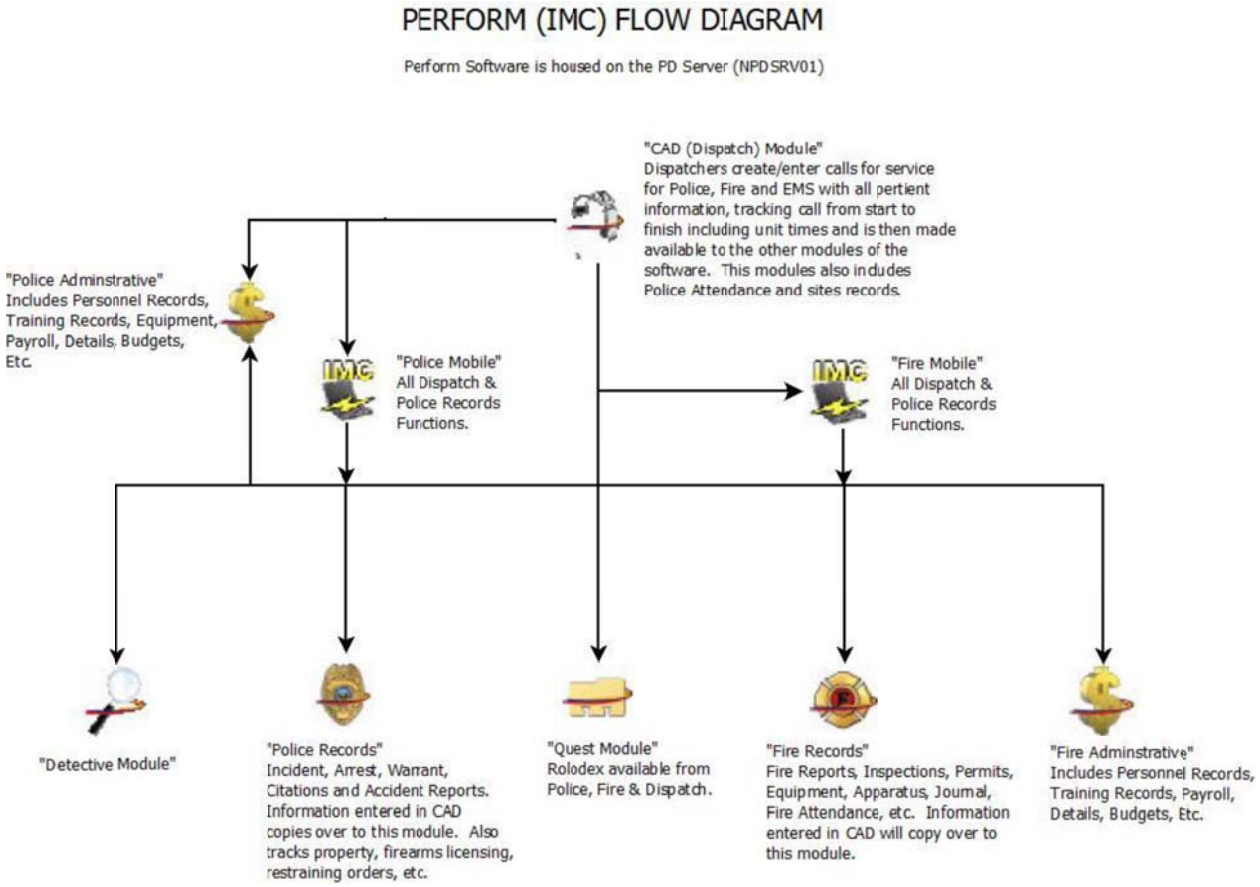

Exhibit 17 - Public Safety Computer Inventory

POLICE DEPARTMENT IT INVENTORY

SERVERS

IMS Server (1) – (Capital Expense)
Computer Modules (2) with VMware vSphere OS
Windows Server Virtual Machines (4)
Windows 7 Virtual Machines (2)
Linux Virtual Machines (1)
Dell Poweredge 2900 (1) – (MIS Capital Expense)
Vicon System (1 Server, 4 DVRs, 3 Workstations & 1 VMDC) – (Building Project Capital Expense)
Infinias System (1 Server) – (Building Project Capital Expense)

CISCO SWITCHES

Catalyst WS-3750X-48T-S (2) – (Capital Expense)
Catalyst WS-C2960S-48TD-L (2) – (Capital Expense) Catalyst WC-C2950T-48-SI (1) – (OM)
HP Switches
ProCurve 5406zl (1) – (MIS 3COM Phone Project Expense)
ProCurve 2610-48-PWR (4) – (MIS 3COM Phone Project Expense)

DESKTOP COMPUTERS

OptiPlex Minitowers (48) – (Mixture OM & Capital Expense)
Precision Workstations (3) – (OM)
Have several spares

LAPTOP COMPUTERS - Latitude Laptops (25) – (Mixture OM, Capital Expense and Drug Forfeiture) *Have spares*

TABLETS - IPad with Cellular (1) – (OM)

PRINTERS

Copiers (3) – (2 Through City Program, 1 Hand Me Down)
Black & White Laser (9) – (OM)
Color Laser (6) – (OM)
Black & White MFC Laser (7) – (OM)
Color MFC Laser (2) – (Drug Forfeiture)
Mobile Ink Jet (7) – (Drug Forfeiture)
Zebra Label Printers (5) – (OM & Drug Forfeiture)
Dymo Label Printers (9) – (OM)

SOFTWARE

VMWare vSphere (See Servers) by VMWare
Veal Backup & Replication Software by Veal
Roxon (Comes with all Desktop & Laptop Computers)
CyberlinkDVD (Comes with all Desktop & Laptop Computers)
Microsoft Office 2007 (37 Professional & 35 Standard)

Firearms Pro (Network License with unlimited users in same building) by Hytek
LogMeIn Central (1 Subscription)
CrashZone (2 Licenses)
Adore (6 Licenses)
Fingerprint Comparison Program (1 License)
Munis (MIS – 7 Computers)
Coplogic (1 Subscription)
Digital Headquarters (1 Subscription)
CaseCracker by Cardinal Peak (2 Systems with 2 OptiPlex Minitowers) (Building Project Capital Expense)
Symantec Endpoint (All Servers, Desktops & Laptops) – (MIS Capital Expense)
Apex Barcode Software (1 License)
PingPlotter (1 License Through FD)
Numerous Open Source & Free Software

UNINTERUPTIPLE POWER SUPPLIES (UPS)

Eaton EX RT 11 with (6) Battery Modules (1) – (Building Project Capital Expense)
Minuteman ED6000T (1) – (Unknown)
APC Portable UPS's (8) – (OM & Building Project Capital Expense)

PROJECTORS

Mitsubishi/DLP XD600U (3) – (Building Project Capital Expense)
MISCELLANEOUS EQUIPMENT
Linksys/Cisco Wireless Routers (1) – (OM)
Ubiquiti Outdoor Wireless Access Point (1) – (OM)
16 Port, 19" KVM Switch (1) – (OM)
3COM VoIP Phones (3101, 3102 & 3103 Models) (54) – (MIS 3COM Phone Project Expense & OM)

STATE EQUIPMENT (Supplied & Maintained by the State)

CJIS Equipment (Includes Router and Switch)
MBI Fiber (Includes Termination Box and Switch)

FIRE DEPARTMENT IT INVENTORY

DESKTOP COMPUTERS

OptiPlex Desktops (25) – (MIS Capital Expense)
OptiPlex Desktops (3) – (OM)
Have several spares

LAPTOP COMPUTERS

Toughbook Laptops (8) – (MIS Capital Expense and Grants)
Latitude XTR Laptops (2) – (OM)
Have couple spares

PRINTERS

Copiers (1 Color) – (Through City Program)
Black & White Laser (2) – (OM)
Color Laser (1) – (OM)
Black & White MFC Laser (3) – (OM)
Color MFC Laser (2) – (OM) Mobile Laser (5) – (OM)

SOFTWARE

Roxio (Comes with all Desktop & Laptop Computers)
CyberlinkDVD (Comes with all Desktop & Laptop Computers)
Microsoft Office 2007 (18 Professional & 19 Standard)
Quickbook Pro 2005 (5 User Licenses)
Adobe Acrobat 9 (1 License)
Truck Tracker 5 (1 License)
Munis (MIS – 4 Computers)
AmbuPro (Including SQL Server) by OCI Software – (Maintenance - OM) Server (1)
Desktop Clients (2)
Mobile/Laptop Clients (5)
Symantec Endpoint (All Servers, Desktops & Laptops) – (MIS Capital Expense)
PingPlotter (1 License, also a license at PD)
Numerous Open Source & Free Software

VIDEO CONFERENCING - LifeSize Express 220 (2) – (Grant)

SMARTBOARDS

Smart Board PX400 Frame (Grant)
MISCELLANEOUS EQUIPMENT
Linksys Wireless Router (2) – (OM)
3COM VoIP Phones (3101, 3102 & 3103 Models) (36) – (MIS 3COM Phone
Project Expense)

POLICE, FIRE & DISPATCH IT INVENTORY

SOFTWARE

Pervasive Database Software (Dispatch Capital Expense) by Pervasive
Servers (1) – Hosted On PD Server
Clients (All computers in all departments with 70 simultaneous users)
Perform (IMC) Software (CAD, Police Records, Police Mobile, Fire Records, Fire Mobile, Administrative, Detective, Quest Modules & DDFs) by TriTech Software – (Dispatch Capital Expense)

Servers (1) – Hosted On PD Server
Clients (All Computers in all departments with 70 simultaneous users)
Police Mobile (10 Licenses)
Fire Mobile (4 Licenses)

FIRE & DISPATCH IT INVENTORY

SERVERS

Dell Poweredge R710 (1) – (Dispatch Capital Expense)
Dell Poweredge 2600 (1) – (Capital Expense)
HP Switches
ProCurve 5406zl (2) – (MIS 3COM Phone Project Expense)
ProCurve 2610-24-PWR (5) – (MIS 3COM Phone Project Expense)

STORAGE DEVICE - Dell RD1000 Removable Hard Disk Drive (1) – (Dispatch Capital Expense)

SOFTWARE

Symantec Backup Exec 2010 (1 License) – (Dispatch Capital Expense
Symantec Endpoint (All Servers, Desktops & Laptops) – (MIS Capital Expense)
PassPoint Door Access Control System (Grant)

UNINTERUPTIBLE POWER SUPPLIES (UPS)

Eaton EX RT 11 with 5 Battery Modules (1) – (Dispatch Capital Expense)
Eaton EX RT 11 with 3 Battery Modules (2) – (Dispatch Capital Expense)
8 Port, 19" KVM Switch (1) – (Dispatch Capital Expense)

STATE EQUIPMENT- Supplied/Maintained by the State) MBI Fiber (Includes Termination Box, Switch, UPS)

DISPATCH DEPARTMENT IT INVENTORY

DESKTOP COMPUTERS

OptiPlex Desktops (7) – (MIS Capital Expense)
OptiPlex Minitower (1) – (OM)
Have couple spares

PRINTERS

Copiers (1) – (Hand Me Down)
Black & White Laser (1) – (OM)

SOFTWARE

Roxio (Comes with all Desktop & Laptop Computers)
CyberlinkDVD (Comes with all Desktop & Laptop Computers)
Microsoft Office 2007 (1 Professional & 4 Standard)
Munis (MIS – 1 Computer)
CritiCall Dispatch Training Software (1 License)
Symantec Endpoint (All Servers, Desktops & Laptops) – (MIS Capital Expense)
Numerous Open Source & Free Software

MISCELLANEOUS EQUIPMENT-3COM VoIP Phones (3102 Model) (4) (MIS 3COM Phone Project Expense)
STATE EQUIPMENT (Supplied/Maintained by the State) - E-911 (Includes Server Rack & Equipment, UPS, Dispatch Consoles, Printer, Recording Equipment, Etc.)

EOC IT INVENTORY

LAPTOP COMPUTERS - Latitude Laptops (4) – (MIS Capital Expense)

PRINTERS - Black & White Laser (1) – (OM)

SOFTWARE

Roxio (Comes with all Laptop Computers)
CyberlinkDVD (Comes with all Laptop Computers)
Microsoft Office 2007 (4 Standard)
Symantec Endpoint (All Laptops) – (MIS Capital Expense)
Numerous Open Source & Free Software

SMARTBOARDS/PROJECTORS

Smart Board SBX855 (1) – (OM)
Epson PowerLite 485W (1) – (OM)

MISCELLANEOUS EQUIPMENT

Linksys/Cisco Wireless Routers (2) – (OM)
Verizon MyFi 4G Cellular Hot Spot – (MIS OM)
3COM VoIP Phones (3101 Model) (8) – (MIS 3COM Phone Project Expense)

Exhibit 18 - City Departmental Equipment Inventory

City Equipment	Model	Additional Information
TRENDnet RFC 110S30i	media converter	connect to Academy Music
Computer	data expert pc model P5 PC1200	returned from Arts council
Mouse	19420F	scroll mouse
Mouse	19420F	scroll mouse
Printer	HP deskjet	model C8970A
Computer	3000 Series	Dell Intel Pentium 4 proc
Computer	OptiPlex 320	Cost includes 17" monitor
monitor extension	Belkin	6 ft. 1.8m extension
Computer	Optiplex 380 minitower	mis five year plan - year 3
Monitor	1905FP	Dell Ultra Sharp 19"
Monitor	1905FP	Dell Ultra Sharp 19"
Monitor	1905FP	Dell Ultra Sharp 19"
Monitor	1905FP	Dell Ultra Sharp 19"
Computer	Optiplex 740 small form factor (XP)	Capital Funds
Computer	Optiplex 740 small form factor (XP)	Capital Funds
Monitor	C1777FP 17"flat	Monitor incl in PC price
Computer	Optiplex 780 MT base	MIS five year plan - year 3
Computer	Optiplex 780 MT base	MIS five year plan - year 3
Computer	Optiplex 740 small form factor (XP)	Capital Funds
Printer	Canon PiXMA inkjet	Item G6531650
Printer Kit	Canon LK 51B	item S4403617
Computer	Optiplex 740 XP Pro	rebuilt
Monitor	C1777FP 17"flat	Monitor included in PC price
Monitor	C1777FP 17"flat	Monitor included in PC price
Monitor	C1777FP 17"flat	Monitor included in PC price
Computer	OptiPlex 320	Cost includes 17" monitor
Computer	OptiPlex 320	Cost includes 17" monitor
Computer	OptiPlex 320	Cost includes 17" monitor
Computer	OptiPlex 320 City #	Cost includes 17" monitor
Mouse	optical scroll	part # 72123
Computer	Optiplex 745 small form factor	Capital Funds
Lenovo think centre	Lenovo Think Centre	bought with Building Dept.
Lenovo think centre	Lenovo Think Centre	bought with Building Dept.
Portable harddrive	500GBLaCie Rikiki Black USB 3.0	
Computer	Dell Optiplex 380	MIS 5 year plan
Computer	Dell Optiplex 380	MIS 5 year plan
Computer	Optiplex 740 small form factor (XP)	Capital Funds
Computer	Optiplex 380 minitower	MIS five year plan - year 3
Switch	SMC Switch	SMC - EZ6505TX
Monitor - Used	optiquest Q71	Model VCDTS21569-5M
Computer	Optiplex 740 small form factor (XP)	Capital Funds
Computer	Optiplex 740 small form factor (XP)	Capital Funds

Computer	Optiplex GX270	from City Clerk to Voters
Computer	Dell Optiplex GX 270	City #33 from MIS stock
Wireless-N-15o Router	D-Link DIR-601/RE	Technology Supplies
Switch 2610		os version 11.16
Switch 2610		os version 11.16
VPN Router	Linksys	4-Port 10/100 Model RVO42
Monitor	C1777FP 17"flat	Monitor included in PC price
Computer	Optiplex 740 small form factor (XP)	Capital Funds
Computer	Optiplex 740 small form factor (XP)	Capital Funds
Computer	Optiplex 740 small form factor (XP)	Capital Funds
Computer	Optiplex 740 small form factor (XP)	Capital Funds City # 852
Monitor	Dell M782 CRT Monitor	City #8 from MIS stock
Monitor	Samsung 23in lcd	
computer	Dell Optiplex GX-280	From back room
computer	Dell Xpro	From back room
Cisco aironet 1142	wireless Aironet 1142	
Computer	OptiPlex 320	Cost includes 17" monitor
Computer	Optiplex 745	Capital Funds
Computer	Optiplex 745	Capital Funds
Computer	Optiplex 360 minitower	5 year technology plan
Computer	Optiplex 360 minitower	5 year technology plan
Computer	Optiplex 780 desktop	MIS five year plan - year 3
Computer	Optiplex 780 desktop	MIS five year plan - year 3
ProCurve Switch J9087A	damaged - returned to HP 9/13/2010	2610-24-PWR
portable hard drive	500GBLaCie Rikiki Black USB 3.0	
Computer	Dell Optiplex 780	MIS 5 year plan
Computer	Dell Optiplex 780	MIS 5 year plan
Computer	Precision 390	Capital Funds
Computer	Precision 390	Capital Funds
Centrecom TX to FX media	Model AT-MC101XL-10	WAN Project
Centrecom TX to FX media	Model AT-MC101XL-10	WAN Project
Printer - Used	Unisys	matrix dot printer
Printer - Used	Unisys	matrix dot printer
Computer	Optiplex 745 small form factor	Capital Funds
Computer	Optiplex 745 small form factor	Capital Funds
Computer	Optiplex 745 small form factor	Capital Funds
Computer	Optiplex 745 small form factor	Capital Funds
Computer	Optiplex 745 small form factor	Capital Funds
ProCurve Switch J9087A	damaged - returned to HP 9/13/2010	2610-24-PWR
Storage converter	Coolmax storage converter usb	
Laptop	Dell Latitude D630 laptop	5 year technology plan
Computer	Optiplex 360 minitower	5 year technology plan
Computer	Optiplex 360 minitower	5 year technology plan
Computer	Optiplex 360 minitower	5 year technology plan
Computer	Optiplex 360 minitower	5 year technology plan
Computer	Optiplex 360 minitower	5 year technology plan
Computer	Optiplex 780 desktop	MIS five year plan - year 3
Computer	Optiplex 780 desktop	MIS five year plan - year 3

Computer	Optiplex 780 desktop	MIS five year plan - year 3
Computer	Optiplex 780 desktop	MIS five year plan - year 3
Computer	Optiplex 780 desktop	MIS five year plan - year 3
Computer	Optiplex 780 desktop	MIS 5 year plan
Computer	Optiplex 780 desktop	MIS 5 year plan
Computer	Optiplex 780 desktop	MIS 5 year plan
Computer	Optiplex 780 desktop	MIS 5 year plan
Computer	Optiplex 780 desktop	MIS 5 year plan
Computer	Optiplex 790 desktop	
Laptop	Dell Latitude E6520	MIS 5 year plan
Laptop	Dell Latitude E6520	MIS 5 year plan
Laptop	Dell Latitude E6520	MIS 5 year plan
HP Jetdirect 175X	usb	print server - usb
Rack	Universal Rack 10636 G2	MIS - city disaster plan
Laptop	HP Probook 4510S	Product # FN07OUT#ABA
Monitor	C1777FP 17"flat	Monitor included in PC price
Monitor	C1777FP 17"flat	Monitor included in PC price
Monitor	C1777FP 17"flat	Monitor included in PC price
Computer	Optiplex 745 small form factor	Capital Funds
Computer	Optiplex 745 small form factor	Capital Funds
Computer	Optiplex 380 minitower	MIS five year plan - year 3
Computer	Optiplex 380 minitower	MIS five year plan - year 3
Computer		942031LAO R9
Gateway	part # 3CRVG71110-07	teleTelephone
Computer	Latitude D820	laptop express 421-434-684-01
parallel adapter	micro adapter	
Mouse	wireless optical	
Surge Protector	3195J, L-shaped	
Computer	Optiplex 360 minitower	5 year technology plan
Computer	Optiplex 780 MT base	MIS five year plan - year 3
Laptop	Dell Latitude E6520	
Switch 2610		os version 11.16
ProCurve Switch	HP 2650-PWR	10/100 50-port w/dual m
Mini-GBIC	HP ProCurve	Gigabit-SX LC Mini-GBIC
ProCurve Switch	HP Procurve 2650 PWR	replacement piece in memorial
Wireless 802.11G	AIR-AP1231G-1	Warren Jones request
Wireless-N-15o Router	D-Link DIR-601/RE	Technology Supplies
Modem	DCM315R	RCA broadband modem cable
Computer		Pentium2 no hard drive OPD98-3
Computer	Dimension 4700	
Monitor	1704FPT	Dell Ultra Sharp 17"
firewall	Barracuda Web Filter	spyware firewall 310
firewall	Barracuda	spam firewall 300
DVD/CD Drive	Sony	rewritable drive
HP JetDirect 170X	parallel	print server - parallel
HP JetDirect 170X	parallel	print server - parallel
Mouse	optical	3 button - Kensington
Mouse	optical	3 button - Kensington

Mouse	optical	3 button - Kensington
Mini-GBIC	HP ProCurve	Gigabit-SX LC Mini-GBIC
Switch - Used	AcerHub 509u	model no ALH-509U
BBSM	Cicso systems	contract 180-06
RCA Broadband - Used	DCM315R	with power supply
Superserver	SATA w/500W	item MB1158
Inter XEON	Inter	item IC7830
BBSM	Cisco Systems	MFG Part BBSM-1190-K9
Audio/video cable	Gold Series	
Telephone adapter	1/4 inch	
Wireless mic system	170mhz - lapel	
Tapes	Fujifilm DLT 40GB	10 tapes at $35.98 each
USB UPS battery	APC smartups1500	Mfg SUA1500 Item#X1382796
USB&serial ups	APC smartups 3000va	Mfg#SUA3000 Item S3313099
USB&serial ups	APC smartups 3000va	Mfg#SUA3000 Item S3313099
HP Procurve Switch	2810-25G-24 ports	Part # S6258309
Remote control	Kensington wireless	Part # G5811526
Computer	Optiplex 745 small Form with Vista City # 846	Capital Funds
Computer	Optiplex 740 small form factor (XP)	Capital Funds
Computer	Optiplex 740 small form factor (XP)	Capital Funds
Computer - Used	OptiPlex GX240	rebuilt - sticker 0000005
storage converter	Coolmax storage converter usb	
Computer	Optiplex 740 small form factor (XP)	Capital Funds
Wireless Card	Linksys Wireless-G Notebook adapter	
Telephone	AT&T digital answering & speaker	
Surge Protector	APC 7 power outlet	
Surge Protector	APC 7 power outlet	
HP Printer	LaserJet 5200 dtn	5 year replacement
firewall	Barracuda	replacement for BAR-SF45095
iSCSI SAN/email system	array,SATA,2xcm, 14x250gb drives, us kit	archiving system (contract)
HP Procurve Switch	mfg J4903A#ABA	switch 2824
HP Proliant Server	Proliant	New Munis
Keyboard - Used	keyboard	
mouse	ball	from spares to Health
Computer	GX 240	spare from back room
DLT tape II (5)	Quantum Super DLTtape II super DLT 1-300	item S2812797
AC power adapter kit	item P SRV 00481451	
VOIP Gateway	3 Com VCX V7111 Voip Gateway	
APC Smarts up 1400	SUI 400 NET	
Computer	Model 3000	
Keyboard - Used		
Scanner	Visionell One touch 8100 Scanner	
UPS	Model BK300C	
UPS	Model BK300	
Cisco Router 1601	Cisco Router 1601	
ADC Kentrox	Satellite 651 DSU	
Computer	Optiplex 380 minitower	MIS five year plan - year 3
TRENDnet RFC 110S30i	media converter	connect to Academy of Music

VCX 2FXS 2FXO Gateway	VCX V7111 VoIP Gateway	from DPW
Monitor	Dell 1908 fpt	from Police Dept (DTripp)
Computer	Dell Optiplex 380	MIS 5 year plan
Computer	Dell Optiplex 380 No. 57	MIS 5 year plan
Computer	Dell Optiplex GX270	City #31 from City Clerk
Fiber cable	LC-ST singlemode duplex 3 meter	
Switch 2610		os version 11.16
Switch 2610		os version 11.16
Switch 2610		os version 11.16
Monitor	EFT720	Envision
Speakers	two	
Computer	Optiplex 380 minitower	mis five year plan - year 3
Computer	Optiplex 380 minitower	MIS five year plan - year 3
Printer	Okidata laserprinter okipage 14ex	from hallway
Laptop	Precision M4300	Dept. bought and paid
Computer	Precision M1300	Capital Funds
PC bluetooth adapter	03 - 00077 - 20	for smartboard for planning
laptop	Dell Inspiron 1720	Capital Funds
Monitor	19" widescreen black lcd	Capital Funds
Computer	Precision T7400	5 year technology plan
Laptop	Precision M4400	CIP acct - Wayne used CC
Server		
Hard drives	2 400GB SCSI hard drives	quote 414411871
Xeon Processor (server)	Xeon Processor C5420 Poweredge 2900	5 year technology plan/police
Monitor	E771	Dell Monitor
Converter	Allied Telesyn	Ethernet Media Converter
Monitor - Used	786N	KDS
Monitor	C1777FP 17"flat	Monitor included in PC price
Monitor - Used	E771p	
Computer	Optiplex 740 small form factor (XP)	Capital Funds
Computer	Optiplex 740 small form factor (XP)	Capital Funds
Proliant ML150	Proliant ML150	
Cisco aironet 1142	ditto	
Modem	SB5100	Motorola Surfboard cable
Computer	AP1337	Unisys Model AP 1337
Modem	modem	RCA digital broadband cable
Computer - Used		loaned to BK must be ret MIS
ProCurve Switch	HP 2650-PWR	10/100 50-port w/dual GBIC
Wireless access pt	Cisco Aironet 1131AG	MFG AIR-AP1131AG-A-K9
Power injector	Cisco Power Injector	MFG AIR-PWRINJ3
USB&serial ups	APC smartups 750va	Mfg#SUA750RM2U
Switch	Iogear MiniView Ultra 8-Port Stackable KVM	Capital Funds
Surge Protector	APC 7 power outlet	
Surge Protector	APC 7 power outlet	
Surge Protector	APC 7 power outlet	
Surge Protector	APC 7 power outlet	
Converter	Allied Telesyn	Ethernet Media Converter
Computer	Dell Optiplex 380	MIS 5 year plan

Monitor	C1777FP 17"flat	Monitor included in PC price
Monitor	C1777FP 17"flat	Monitor included in PC price
Computer	OptiPlex 320	Cost includes 17" monitor
Computer	Dell Optiplex 380	MIS 5 year plan
Monitor	emachine 21.5	MIS 5 year plan
computer	Optiplex 780 MT base	MIS five year plan - year 3
Computer	Dell Optiplex GX270	back room in MIS
Monitor	Dell E770p	from backroom to Veterans'
Laptop	HP Pavillion G4	bought by Vet's office
laptop	Latitude D610	Pentium M 720 w/case
Computer	OptiPlex 170L	w/17"monitor - JCCHR51
Computer	OptiPlex GX270	
WIC-1ENET		Cisco Systems
switch	Linksys	5 port workgroup switch
Monitor	C1777FP 17"flat	Monitor included in PC price
cables		
license	VISIO	with media
Printer Cradle Kit	Canon CD 51B UPC	item G4338039
Computer	Dell Optiplex 170L - JCCHR51	on loan to HR
Switch J4859C	Procurve Gigabit LX-LC GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705Z	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project

Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve Gig T 4 mGBIC	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LCM	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project

Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch 8712A	Procurve 875W P S	WAN Project
Switch 8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project

Switch J4859C	Procurve Gigabit LX-LC Mini-GBIC	WAN Project
Switch J8697A	Procurve 5406 Intelligent Edge	WAN Project
Switch J8705A	Procurve 20 Gig T 4 mGBIC Mo	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
Switch J8712A	Procurve 875W P S	WAN Project
ProCurve Switch J9087A		2610-24-PWR
Computer	Dell Optiplex 380	MIS 5 year plan
Computer	Dell Optiplex 380	MIS 5 year plan
Computer	Dell Optiplex 380	MIS 5 year plan
Server	PowerEdge R200	Laserfiche
Computer	Optiplex 790 desktop	MIS 5 year plan
Computer	Optiplex 790 desktop	MIS 5 year plan
Computer	Optiplex 790 desktop	MIS 5 year plan
Computer	Optiplex 790 desktop	MIS 5 year plan
Computer	Optiplex 790 desktop	MIS 5 year plan
Computer	Optiplex 790 desktop	MIS 5 year plan
Computer	Optiplex 745 small form	
external hard drive	1 TB external hard drive	11552-558003
external hard drive	1 TB external hard drive	11552-558003
external hard drive	1 TB external hard drive	11552-558003
external hard drive	1 TB external hard drive	11552-558002
external hard drive	1 TB external hard drive	11552-558003
Cisco Aironet 1200 series	air ap1231g-a-k9	11552-558003
Cisco Aironet 1200 series	air ap1231g-a-k9	11552-558003
Computer	Lenovo thinkcentre m57p	MIS 5 year plan
Computer	lenovo thinkcentre m57p	MIS 5 year plan
Computer	lenovo thinkcentre m57p	MIS 5 year plan
Computer	Lenovo thinkcentre m57p	MIS 5 year plan
Computer	Lenovo thinkcentre m57p	MIS 5 year plan
VGA extender	VGA extender PLUS upto 180 Meter	
Procurve J9087-61001	Part # F0N183628006A-C	replacement
Monitor	Acer 20"	
Monitor	Acer 20"	
Computer	Dell 360	
Monitor	Model 715VN	
Monitor	Model VA2212M-LED 22 inch HD	
Monitor	Model VA2212M-Led 22 inch HD	
Monitor	Model VA2212M-Led 22 inch HD	
speakers	2 beige	from MIS
Gateway 2FXS/2FXO	3CRVG71116-07	from MIS
Keyboard - new		from MIS
Switch J9087-60001	Procurve 2610-POE	
Switch J9087-69001	Procurve	replacement
fast ethernet switch	8 Port/ 10/100 mbps	PID:7854 M108
fast ethernet switch	8 Port/ 10/100 mbps	PID:7854 M108
fast ethernet switch	8 Port/ 10/100 mbps	PID:7854 M108
fast ethernet switch	8 Port/ 10/100 mbps	PID:7854 M108
fast ethernet switch	8 Port/ 10/100 mbps	PID:7854 M108

Computer	Think Center Lenovo	off lease
Computer	Think Center Lenovo # 54	off lease
Computer	Think Center Lenovo	off lease
Computer	Think Center Lenovo	off lease
Computer	Think Center Lenovo	off lease
Computer	Think Center Lenovo	off lease
Computer	Think Center Lenovo	off lease
Computer	Think Center Lenovo	off lease
Computer	Think Center Lenovo City # 65	off lease
Mini Print Server	TRENDnet	
wireless access pt	Engenius ECB350	
Surge Protector	Dbii PoE	
WiFi Range Extender	Universal WiFi Range Extender	Netgear
Wireless -N USB Adapter	N300 Linksys Adapter	
EVGA graphic card	GeForce 8400 GS 1 GB graphic card	EVGA
2TB Hard Drive	3.5 inch, 7200 rpm, sata ii 64 mb	sku 29750001502-5
Keyboard - new		
Computer	Optiplex 7010 Desktop Base	
Computer	Optiplex 7010 Desktop Base	
Wireless Router	ASUS N66U N900 Dual Band	
Monitor	LG EB224-2T-BN LED Flatron	22"
KVM Switch TAG # 56	2 port Linxcel PS2 w/built in cables	Product 2191
USB to PS/2 converter TAG # 55	adapter	Product 6854
Computer	Optiplex 7010 Desktop Base	5 year plan
Computer	Optiplex 7010 Desktop Base	5 year plan
Computer	Optiplex 7010 Desktop Base	5 year plan
Computer	Optiplex 7010 Desktop Base	5 year plan
Computer	Optiplex 7010 Desktop Base	5 year plan
Computer	Optiplex 7010 Desktop Base	5 year plan
Computer	Optiplex 7010 Desktop Base	5 year plan
ASUS RT-N16 SuperSpeed N Router	ASUS RT-N16 Router	
DSL Wi-Fi- Gateway	Motorola 4 port	
battery RBC 43		
KVM cable	#8199 6 foot	
Cat5e crossover inline coupler	#7282	
White cable USB M/M	#8617 10 foot	
Switch		
HP Procurve Switch 5406ZL	J8697A	from Florence Learn.Ctr.
Laptop - HP Elitebook 6930p	notebook	City # 61
monitor	17"	from MIS City # 63
Drobo B800i	800i	backup at fire station
Computer Lenovo thinkcentre M57	desktop City # 67	M977-19342
Computer Lenovo Thinkcentre M57	desktop	M977-19342
Drobo B800i Storage rack	black rack	credit card
Monitor	Samsung	City # 64
Monitor	LG 22"wide (given 9/12/2013)	City # 68
Monitor	LG 22"wide	City # 69
Telephone	HP (3 com) 3502 JC507A	City # 70

Computer	LVO TS TC M72E I5 3470	City # 72
Wireless Router	ASUS RT-N66U Dual Band N900	City # 80
Wireless Router	ASUS RT-N66U Dual Band N900	City # 82
Computer	Lenovo thinkcentre m72e	City # 79
Wireless Router Power	power supply cord	City # 81
Wireless Router Power	power supply cord	City # 83
Monitor	LG 22"	City # 84
Monitor	LG 22"	City # 85
Monitor	LG 22"	City # 86
Monitor	LG 22"	City # 87
Monitor	LG 22"	City # 88
Computer	Lenovo Think Centre M58	
Computer	Lenovo Think Centre M58	
Computer	Lenovo Think Centre M58	
Computer	Lenovo Think Centre M58	
Computer	Lenovo Think Centre M58	
Computer	Lenovo Think Centre M58	
Computer	Lenovo Think Centre M55	
Screen	Versatol 70 inch tripod screen - white	City # 92
Switch	HP Procurve Switch	
Projector	Epson PowerLite x12	City # 89
Projector Remote	Remote	City # 90
Monitor	lg 22 INCH LED	City # 94
Monitor	LG 22 INCH LED	City # 93
Computer	ThinkCentre M72e	City # 96
Monitor	Viewsonic TD2220 22 inch touch display	City # 97
Adapter	USB 2.0 to DVI display adapter	City # 98 # 99
Monitor	19" (used from Jason Doyle - Central Ser.)	City # 100
Laptop - toughbook	Panasonic CF-31	
Laptop - toughbook	Panasonic CF-31	
Transceiver	HP ProCurve Gigabit 10 Gbase	
Transceiver	HP ProCurve Gigabit 10 Gbase	
Software	Stellar Phoenix Windows - Data recovery Pro	
Computer	Lenovo M58	City # 949
Computer	Lenovo M58	City # 948
Computer	Lenovo M58	City # 960
Computer	Lenovo M58	City # 961
Computer	Lenovo M58	City # 969
Computer	Lenovo M58	City # 968
Computer	Lenovo M58	City # 967
Computer	Lenovo M58	City # 971
Computer	Lenovo M58	City # 972
VGA extender	VGA extender PLUS upto 180 Meter	City # 101
(second part of VGA extender)		City # 102
Surge Protector	Belkin 8 outlet pivot w/6ft. Cord and Tele.pro.	City # 937
Surge Protector	Belkin 8 outlet pivot w/6ft. Cord and Tele.pro.	City # 938
Surge Protector	Belkin 8 outlet pivot w/6ft. Cord and Tele.pro.	City # 939
Surge Protector	Belkin 8 outlet pivot w/6ft. Cord and Tele.pro.	City # 940

Computer	Dell 380	City # 941
Monitor		City # 103
APC UPS	APC Smart UPS 3000 LCD	City # 942
hard drives	WES WD6001BKHG	
Web Filter	Barracuda Web Filter 410	
4 port 10 GB	HP 4 PORt 10 GBE SFP module	
4 port 10 GB	HP 4 PORt 10 GBE SFP module	
Monitor	17" Samsung	City # 95
Monitor	Model # VS14818	City # 945
Monitor	Model # VS14818	City # 946
Cable	DisplayPort to DVI Video Converter 6 foot	
Cable	DisplayPort to DVI Video Converter 6 foot	
Soundbar	USB soundbar AC511	
Computer	Optiplex 7010 Desktop Base	
Computer	Optiplex 7010 Desktop Base	
Monitor	19" square	City # 947
Drobo	Drobo 5N	City # 955
Drobo	Drobo 5N Power Battery	City # 956
Hard drives	WD Red 1 TB NAS	
Hard drives	WD Red 1 TB NAS	
Monitor	Model PLL2710W	City # 957
Monitor	Acer 17" flat	City # 962
Monitor	Dell flat screen	City # 974
Computer	HP Compaq dc 7900	
Computer	HP Compaq dc 7900	
Computer	HP Compaq dc 7900	
Computer	HP Compaq dc 7900	
Computer	HP Compaq dc 7900	
Computer	HP Compaq dc 7900	
Computer	HP Compaq dc 7900	
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Computer	HP Compaq dc 7900	
Computer	HP Compaq dc 7900	
Computer	HP Compaq dc 7900	
Computer	HP Compaq dc 7900	
Computer	HP Compaq dc 7900	
Computer	Hp CD7900	
Computer	Hp CD7900	
Laptop	Dell Latitude E6410 Notebook PC	City # 842
Laptop Battery Supply	Battery Supply Pack	City # 843
Step Stool	2 step	City # 845
Label Maker	Brother	City # 844
Computer	HP DC7800	City # 849
Computer	HP DC7800	City # 850
Computer	HP DC7800	City # 920
Server - Telephone	DL360G7 E5630 HP Proliant	City # 851

Server - Telephone	DL360G7 E5630 HP Proliant	
Server - Telephone	VCX V6100 Digital Chassis	
Laptop	Lenovo ThinkPad T4302349-14 Core i5	City # 854
Laptop Battery Supply	Lenovo Battery Supply Pack	City # 855
Monitor	Acer 22" flatscreen	City # 853
AutoCAD Light architectural software	1 license	
Printer	HP laser jet pro. M1212	
Copier	Aficio MP6000 PCL6	
Laptop	Dell Latitude D600 - 6XR4451	City # 857